PIONEER
TECHNICAL SERVICES, INC.

June 11, 2013

RECEIVED
JUN 12 2013
Dept. of Enviro. Quality
Waste & Underground
Tank Management Bureau

Mr. Martin Van Oort
Montana DEQ/Solid Waste Program
P.O. Box 200901
Helena, MT 59620-0901

RE: Old Butte-Silver Bow County Landfill/Clark Tailings

Dear Martin:

Enclosed please find results from the Old Butte-Silver Bow County Landfill/Clark Tailings April 2013 semi-annual groundwater monitoring event. The following have been included for your information:

- April 2013 sampling summary;
- Table 1 analytical data summary;
- Table oldlfctapr13 (non-parametric comparison of wells);
- Groundwater field parameters collected in the field;
- Copy of field notes;
- Trend graphs of detected compounds;
- Groundwater potentiometric surface map for April 2013; and
- Analytical data from Pace Laboratories in Minneapolis, Minnesota.

The calculated Confidence Level of 97.5% was found using the formula n/(n+k), where n is the total number of background samples collected and k is the number of future sampling events (Section 4.2.1 Non-Parametric Prediction Intervals, Pages 61-63 and Table A-7 Appendix A; Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities; and Addendum to Interim Final Guidance Office of Solid Waste Permits and State Programs Division, U.S. EPA , July 1992).

The groundwater velocity was calculated using Darcy's Law and the equation for seepage velocity. The average groundwater velocity for the April 2013 sampling event was 0.44 feet per day (ft/day).

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The hydraulic conductivity value used to obtain the groundwater velocity was obtained from the *Corrective Measures Assessment Report* (Pioneer Technical Services, Inc., April 2009) and from pumping data from the March 2009 sampling.

Sincerely,

Brad Hollamon
Senior Technician

Encl.
cc. Rick Larson, BSB Landfill Manager
JD Emmert, Pioneer Technical Services Inc.

OLD SILVER BOW LANDFILL
APRIL 2013 GROUNDWATER MONITORING

The April 2013 round of sampling at the Old Silver Bow Landfill included sampling for the full Table 2 list of analytics in accordance with the Assessment Monitoring program. Table 1, attached, summarizes the analytical results. The discussion below compares these data to previous results and to current Maximum Contaminant Levels (MCLs) and Montana Human Health Standards (HHSs).

Well MBMG-2 (up gradient):

MBMG-2 is the background well for this site. No semi-volatiles, volatile, or chlorinated acids were detected above the reporting limit in the well during this sampling event. One pesticide compound was detected; Picloram (0.23 ug/L). Metals detected in this well above the MDL are; As (.0011 mg/L), Ba (0.130 mg/L), Co (0.00079 mg/L), Cr (0.0016 mg/L), Cu (0.0038 mg/L), , Se (0.0010 mg/L), and V (0.0067 mg/L).
Nitrate/nitrite (8.30 mg/L) was also detected above the MDL.
No MCL or HHS exceedences were observed in this well during this sampling event.

Well BSB-A1 (North):

No volatile, semi-volatile, chlorinated acids were detected above the reporting limit in the well during this sampling event. One pesticide compound was detected; Picloram (0.10 ug/L). In accordance with the modified assessment-monitoring program, a sample for metals analyses was not collected from this well.
Cyanide (0.0125 mg/L) was detected at levels above both maximum baseline (0.010 mg/L) and maximum background (0.010 mg/L) in this well during this sampling event.
No MCL or HHS exceedences were observed in this well during this sampling event.

Well BSB-A5 (Northeast Well):

No semi-volatile compounds were detected in the well above the reporting limit during this sampling event. In accordance with the modified assessment-monitoring program, a sample for metals analyses was not collected from this well
Three volatile organic compounds (VOC's) were detected in this well; none were detected at levels above the reporting limit. The three volatile organic compounds were as follows:

- Cis-1,2 – Dichloroethene (0.91 J ug/L);
- Tetrachloroethene (0.32 J ug/L);
- Trichloroethene (0.11 J ug/L).

One pesticide compound was detected; Picloram (0.20 ug/L).

Cyanide (0.020 mg/L) was detected at levels above both maximum baseline (0.0125 mg/L) and maximum background (0.010 mg/L) in this well during this sampling event.
No MCL or HHS exceedences were observed in this well during this sampling event.

Well BSB-A6-R (Central Well):

Well BSB-A6-R is the replacement well for BSB-A6, removed during the construction of Timber Butte Youth Park. Eleven volatile organic compounds (VOC's) were detected in this well; six of the eleven were detected at levels below the reporting limit. The eleven volatile organic compounds were as follows:

- Benzene (0.56 J ug/L);
- Chloroethane (0.24 J ug/L);
- 1,4 – Dichlorobenzene (2.8 ug/L); exceeds maximum background.
- Dichlorodifluoromethane (1.1 ug/L); exceeds maximum background.
- 1,1-DCA (1.2 ug/L); exceeds maximum background.
- Cis-1,2-DCE (3.7 ug/L); exceeds maximum background.
- Ethylbenzene (0.14 J ug/L);
- 1,2-Dichloropropane (0.43 J ug/L);
- Tetrachloroethene (0.26 J ug/L);
- Trichloroethene (0.33 J ug/L);
- Vinyl Chloride (2.4 ug/L); exceeds maximum background.

Vinyl Chloride exceeds the MDEQ-7 HHS standard of 0.20 ug/L.
No other semi-volatiles, pesticides or chlorinated acids were detected above the reporting limit during this sampling event.
In accordance with the modified assessment-monitoring program, a sample for metals analyses was not collected from this well.
Cyanide (0.0158 mg/L) and COD (565 mg/L), exceeded maximum background concentrations for these compounds.

Well CLK-1 (Clark Tailings East Well):

In accordance with the modified assessment-monitoring program, no samples for organic analyses were collected from this well. Metals detected above maximum background are; arsenic (0.12 mg/L), cadmium (0.016 mg/L, colbalt (0.050 mg/L), iron (17.4 mg/L), nickel (0.044 mg/L) and zinc (61.2 mg/L). Arsenic, cadmium, iron and zinc exceed US EPA MCL or Montana HHS standards.
Sulfate was detected at a concentration of 1050 mg/L, which exceeds the maximum background and the secondary MCL for this compound.

Well CLK-2 (Clark Tailings North Well):

In accordance with the modified assessment-monitoring program, no samples for organic analyses were collected from this well. Metals detected above maximum background but below maximum baseline are; nickel (0.015 mg/L) and zinc (0.094 mg/L).
Concentrations for both of these metals are well below MCLs, secondary MCLs, or Montana HHS concentrations for these metals.

Sulfate was detected at a concentration of 885 mg/L, which exceeds the maximum background and the secondary MCL for this compound.

Conclusion:

The April 2013 sampling event at the Old Butte-Silver Bow Landfill included sampling according to the modified assessment-monitoring program (see Table 1 for analytical data). The results for metals, inorganics, and organic contaminants obtained from this sampling event were comparable to previous results. The continued detections for Picloram in monitoring wells MBMG-2, BSB-A1 and BSB-A5 and cyanide in wells BSB-A1, BSB-A5 and BSB-A6R will be monitored closely in future sampling events.

SAMPLE NUMBER WELL ANALYTE (units):	BSB-GW-O1 MBMG-2	BSB-GW- BSB-A1	BSB-GW-O9 Field Blank Trip Blank	GW PROTECTION STANDARDS USEPA MCL*	 MONTANA HHS
DISSOLVED METALS (mg/L)					
Antimony	(Pace 0.00013 J)< 0.0005	NR	SA	0.006	0.014
Arsenic	0.0011	NR	SA	0.05	0.01
Barium	0.13	NR	SA	2	2
Beryllium	< 0.00020	NR	SA	0.004	0.004
Cadmium	< 0.00008	NR	SA	0.005	0.005
Chromium	0.0016	NR	SA	0.1	0.1
Cobalt	0.00079	NR	SA	- - -	- - -
Copper	0.0038	NR	SA	1.3 (a)	1.3
Iron	< 0.05	NR	SA	0.3(s)	0.3
Lead	(Pace 0.000063J)< 0.00010	NR	SA	0.015 (a)	0.015
Mercury	< 0.0002	NR	SA	0.002	0.002
Nickel	(Pace 0.00027 J)< 0.0005	NR	SA	0.1	0.1
Selenium	0.0010	NR	SA	0.05	0.05
Silver	(Pace 0.000058J)< 0.00050	NR	SA	0.1	0.1
Thallium	< 0.00010	NR	SA	0.002	0.002
Tin	NR	NR	SA		
Vanadium	0.0067	NR	SA	- - -	- - -
Zinc	(Pace 0.0015J)< 0.0050	NR	SA	5	2
INORGANICS (mg/L)					
Chloride	NR	NR	SA	250	- - -
COD	< 50.0	< 50.	SA	- - -	- - -
Conductivity (umhos/cm)	NR	NR	SA	- - -	- - -
Cyanide	(Pace 8.70 J)< 0.01	12.	SA	- - -	0.2
Nitrate\Nitrite - N	8.3	0.3	SA	10	10
pH	NR	NR	SA		
Sulfate	NR	NR	SA	250	- - -
Sulfide	< 5.0	< 5.0	SA		
EPA METHOD 8260 (ug/L)					
Acetone	< 20.0	< 25.	< 20.0	- - -	- - -
Benzene	< 1.0	< 1.0	< 1.0	5	5
Carbon Disulfide	< 1.0	< 1.0	< 1.0	- - -	- - -
Chloroethane	< 1.0	< 1.0	< 1.0	- - -	- - -
Chloroform	< 1.0	< 1.0	< 1.0	- - -	70
Chlormethane	< 4.0	< 4.0	< 4.0	- - -	- - -
1,4-Dichlorobenzene	< 1.0	< 1.0	< 1.0	75	75
Dichlorodiflouromethane	< 1.0	< 1.0	< 1.0	- - -	1000
1,1-Dichloroethane	< 1.0	< 1.0	< 1.0	- - -	- - -
1,2-Dichloroethane	< 1.0	< 1.0	< 1.0	5	4
cis-1,2-Dichloroethene	< 1.0	(Pace 0.53 J)< 1.0	< 1.0	70	70
trans-1,2-Dichloroethene	< 1.0	< 1.0	< 1.0	100	100
Ethylbenzene	< 1.0	< 1.0	< 1.0		
1,2-Dichloropropane	< 4.0	< 4.0	< 4.0	5	5
4-Isopropyltoluene	NR	NR	NR	- - -	- - -
Methylene Chloride	< 4.0	< 4.0	4.1	5	30
Naphthalene	< 11.5	< 10.	< 10.0	- - -	100
Tetrachloroethene	< 1.0	< 1.0	< 1.0	5	5
Trichloroethene	< 1.0	< 1.0	< 1.0	5	5
1,2,4-Trimethylbenzene	NR	NR	NR	- - -	- - -
Vinyl Chloride	< 0.4	< 0.4	< 0.4	2	0.2
EPA METHOD 8270 (ug/L)					
bis(2-ethylhexyl)Phthalate	< 11.5	< 10	SA	6	6
EPA METHOD 8151 (ug/L)			SA		
Picloram	0.23	0.10			
Dicamba	< 0.098	< 0.09			
2,4,5-TP (Silvex)	< 0.2	< 0.2			
2,4-D	< 0.98	< 0.98			
EPA METHOD 8081 (ug/L)	ND	ND	NR		
EPA METHOD 8082 (ug/L)	ND	ND	NR		

* MCL definitions: a = action level, not an MCL; s = secondary MCL (aesthetics)
NA = Not enough sample available for analysis
NR = Analysis Not Requested
ND = Analyte Not Detected
J = Estimated Quantity. Anlyte present, but less than the practical quantitation limit (PQL).
NS= Sample Not Collected (Dry Well-BSB-A5)
SA = Sample Not Taken

TABLE I: ANALYTICAL DATA FOR GROUNDWATER SAMPLES, OLD SILVER BOW COUNTY LANDFILL

DATE SAMPLED: April 02, 2013

SAMPLE NUMBER	BSB-GW-O1	BSB-GW-O2	BSB-GW-O3	BSB-GW-O4	BSB-GW-O5	BSB-GW-O6	BSB-GW-07	BSB-GW-08	BSB-GW-O9	GW PROTECTION STANDARDS	
WELL	MBMG-2	BSB-A1	BSB-A5	BSB-A6-R	CLK-1	CLK-2	BSB-A6R DUPE	CLK-2 DUPE	Field Blank	USEPA	MONTANA
ANALYTE (units):									Trip Blank	MCL*	HHS
DISSOLVED METALS (mg/L)											
Antimony	(Pace 0.00013 J)< 0.0005	NR	NR	NR	(Pace 0.00016 J)< 0.0005	Pace 0.000082 J)< 0.0005	SA	< 0.0005	SA	0.006	0.014
Arsenic	0.0011	NR	NR	NR	0.120	0.0009	SA	0.0010	SA	0.05	0.01
Barium	0.13	NR	NR	NR	0.025	0.018	SA	0.017	SA	2	2
Beryllium	< 0.00020	NR	NR	NR	0.00038	< 0.0002	SA	< 0.0002	SA	0.004	0.004
Cadmium	< 0.00008	NR	NR	NR	0.016	0.00062	SA	0.00050	SA	0.005	0.005
Chromium	0.0016	NR	NR	NR	(Pace 0.00046 J)< 0.0005	0.0009	SA	0.0009	SA	0.1	0.1
Cobalt	0.00079	NR	NR	NR	0.05	0.0008	SA	(Pace 0.00035 J)< 0.0005	SA	- - -	- - -
Copper	0.0038	NR	NR	NR	0.0005	0.0019	SA	0.0018	SA	1.3 (a)	1.3
Iron	< 0.05	NR	NR	NR	17.4	< 0.050	SA	< 0.050	SA	0.3(s)	0.3
Lead	(Pace 0.000063J)< 0.00010	NR	NR	NR	< 0.00010	< 0.00010	SA	< 0.00010	SA	0.015 (a)	0.015
Mercury	< 0.0002	NR	NR	NR	NR	NR	SA	NR	SA	0.002	0.002
Nickel	(Pace 0.00027 J)< 0.0005	NR	NR	NR	0.044	0.0150	SA	0.0140	SA	0.1	0.1
Selenium	0.0010	NR	NR	NR	< 0.0005	(Pace 0.00013 J)< 0.0005	SA	(Pace 0.00031 J)< 0.0005	SA	0.05	0.05
Silver	(Pace 0.000058J)< 0.00050	NR	NR	NR	< 0.0005	< 0.0005	SA	< 0.0005	SA	0.1	0.1
Thallium	< 0.00010	NR	NR	NR	Pace 0.000037 J)< 0.0001	< 0.0001	SA	< 0.0001	SA	0.002	0.002
Tin	NR	NR	NR	NR	NR	NR	SA	NR	SA		
Vanadium	0.0067	NR	NR	NR	0.00036	0.0020	SA	0.0019	SA	- - -	- - -
Zinc	(Pace 0.0015J)< 0.0050	NR	NR	NR	61.2	0.270	SA	0.250	SA	5	2
INORGANICS (mg/L)											
Chloride	NR	NR	NR	NR	31	48	SA	48	SA	250	- - -
COD	< 50.0	< 50.0	64.2	565	NR	NR	SA	NR	SA	- - -	- - -
Conductivity (umhos/cm)	NR	NR	NR	NR	1870	1730	SA	1720	SA	- - -	- - -
Cyanide	(Pace 8.70 J)< 0.01	12.5	20	15.8	NR	NR	SA	NR	SA	- - -	0.2
Nitrate\Nitrite - N	8.3	0.31	0.7	< 0.10	NR	NR	SA	NR	SA	10	10
pH	NR	NR	NR	NR	6.0	6.3	SA	6.3	SA		
Sulfate	NR	NR	NR	NR	1050	885	SA	845	SA	250	- - -
Sulfide	< 5.0	< 5.0	8.6	16.2	NR	NR	SA	NR	SA		
EPA METHOD 8260 (ug/L)											
Acetone	< 20.0	< 25.0	< 25.0	< 25.0	NR	NR	< 25.0	NR	< 20.0	- - -	- - -
Benzene	< 1.0	< 1.0	< 1.0	(Pace 0.56 J)< 1.0	NR	NR	(Pace 0.50 J)< 1.0	NR	< 1.0	5	5
Carbon Disulfide	< 1.0	< 1.0	< 1.0	< 1.0	NR	NR	< 1.0	NR	< 1.0	- - -	- - -
Chloroethane	< 1.0	< 1.0	< 1.0	(Pace 0.24 J)< 1.0	NR	NR	(Pace 0.22 J)< 1.0	NR	< 1.0	- - -	- - -
Chloroform	< 1.0	< 1.0	< 1.0	< 1.0	NR	NR	< 1.0	NR	< 1.0	- - -	70
Chlormethane	< 4.0	< 4.0	< 4.0	< 4.0	NR	NR	< 4.0	NR	< 4.0	- - -	- - -
1,4-Dichlorobenzene	< 1.0	< 1.0	< 1.0	2.8	NR	NR	2.5	NR	< 1.0	75	75
Dichlorodiflouromethane	< 1.0	< 1.0	< 1.0	1.1	NR	NR	1.1	NR	< 1.0	- - -	1000
1,1-Dichloroethane	< 1.0	< 1.0	< 1.0	1.2	NR	NR	1.1	NR	< 1.0	- - -	- - -
1,2-Dichloroethane	< 1.0	< 1.0	< 1.0	< 1.0	NR	NR	< 1.0	NR	< 1.0	5	4
cis-1,2-Dichloroethene	< 1.0	(Pace 0.53 J)< 1.0	(Pace 0.91 J)< 1.0	3.7	NR	NR	3.2	NR	< 1.0	70	70
trans-1,2-Dichloroethene	< 1.0	< 1.0	< 1.0	< 1.0	NR	NR	< 1.0	NR	< 1.0	100	100
Ethylbenzene	< 1.0	< 1.0	< 1.0	(Pace 0.14 J)< 1.0	NR	NR	(Pace 0.15 J)< 1.0	NR	< 1.0		
1,2-Dichloropropane	< 4.0	< 4.0	< 4.0	(Pace 0.43 J)< 4.0	NR	NR	(Pace 0.39 J)< 4.0	NR	< 4.0	5	5
4-Isopropyltoluene	NR	NR	NR	NR	NR	NR	NR	NR	NR	- - -	- - -
Methylene Chloride	< 4.0	< 4.0	< 4.0	< 4.0	NR	NR	< 4.0	NR	4.1	5	30
Naphthalene	< 11.5	< 10.0	< 10.0	< 10.0	NR	NR	< 10.0	NR	< 10.0	- - -	100
Tetrachloroethene	< 1.0	< 1.0	(Pace 0.32 J)< 1.0	(Pace 0.26 J)< 1.0	NR	NR	(Pace 0.21 J)< 1.0	NR	< 1.0	5	5
Trichloroethene	< 1.0	< 1.0	(Pace 0.11 J)< 1.0	(Pace 0.33 J)< 1.0	NR	NR	(Pace 0.33 J)< 1.0	NR	< 1.0	5	5
1,2,4-Trimethylbenzene	NR	NR	NR	NR	NR	NR	NR	NR	NR	- - -	- - -
Vinyl Chloride	< 0.4	< 0.4	< 0.4	2.4	NR	NR	2.2	NR	< 0.4	2	0.2
EPA METHOD 8270 (ug/L)											
bis(2-ethylhexyl)Phthalate	< 11.5	< 10	< 10	< 10	NR	NR	SA	SA	SA	6	6
EPA METHOD 8151 (ug/L)					NR	NR	SA	SA	SA		
Picloram	0.23	0.10	0.20	< 0.096							
Dicamba	< 0.098	< 0.098	< 0.098	< 0.098							
2,4,5-TP (Silvex)	< 0.2	< 0.2	< 0.2	< 0.2							
2,4-D	< 0.98	< 0.98	< 0.98	< 0.98							
EPA METHOD 8081 (ug/L)	ND	ND	ND	ND	NR	NR	SA	SA	NR		
EPA METHOD 8082 (ug/L)	ND	ND	ND	ND	NR	NR	SA	SA	NR		

* MCL definitions: a = action level, not an MCL; s = secondary MCL (aesthetics)

NA = Not enough sample available for analysis

NR = Analysis Not Requested

ND = Analyte Not Detected

J = Estimated Quantity. Anlyte present, but less than the practical quantitation limit (PQL).

NS= Sample Not Collected (Dry Well-BSB-A5)

SA = Sample Not Taken

Old Butte-Silver Bow County Landfill
GROUNDWATER FIELD CHEMISTRY RESULTS AND PURGE VOLUMES
April-13

Well I.D.	Sample #	Depth (ft)	Radius (ft)	S.W.L. (ft)	TOC Elevation (ft)	Groundwater Elevation (ft)	pH. (su)	E.h. (mV)	S.C. (uS/cm)	T (Celsius)	Sample Time	H2O Volume Req'd (gal)	H2O Volume Purged (gal)	Comments
MBMG-2	BSB-GW-01	23.25	0.17	11.45	5529.88	5518.43	7.28	469.2	769	6.8	10:25	5.90	12.40	
BSB-A1	BSB-GW-02	57.00	0.17	52.53	5531.50	5478.97	7.10	458.8	421	11.5	13:22	2.24	10.75	
BSB-A5	BSB-GW-03	45.60	0.17	44.75	5524.62	5479.87	6.33	454.70	857	12.4	14:15	0.43	1.25	
BSB-A6-R	BSB-GW-04	59.75	0.17	51.98	5554.41	5502.43	6.10	298.9	3640	13.0	16:10	3.89	3.99	
BSB-A6-R	BSB-GW-07	59.75	0.17	51.98	5554.41	5502.43	6.10	298.9	3640	13.0	16:10	3.89	3.99	VOC Duplicate
CLK-1	BSB-GW-05	19.00	0.17	5.35	5478.73	5473.38	6.24	467.8	1906	7.5	9:48	6.83	12.50	
CLK-2	BSB-GW-06	46.90	0.17	41.34	5511.17	5469.83	6.29	450.3	1690	9.9	11:22	2.78	3.50	
CLK-2	BSB-GW-08	46.90	0.17	41.34	5511.17	5469.83	6.29	450.3	1690	9.9	11:22	2.78	3.5	Raw, DM Duplicate
Blank	BSB-GW-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	15:00	NA	NA	Field Blank

KEY:

NA	Measurement Not Taken
SA	Sample Not Taken

FIELD SAMPLE DATA SHEET

Page 1 of 1

Project Name: BSB Old Landfill
WELL/STATION MGMB-2
DATE 4/2/13
TIME 0900
SAMPLERS DJ Renz, R. Hazlett
WEATHER CONDITIONS Sunny, calm, 46°
PHOTO: Yes ______ No X
ROLL# ______
NUMBER ______

PURGE DATA:

PURGE METHOD Geo tech 2" Submersible
START PURGING 0922
PURGE RATE 0.20 GPM
RATE CHANGE 1) Time ______ Rate ______
2) Time 1015 Rate 0.25
SAMPLE TIME 1025

WELL DEPTH 23.20 Feet
DEPTH TO WATER 11.45 Feet
COLUMN DEPTH 11.75 Feet
CASING DIAMETER 2 Inch
PUMP SET AT 20 Feet
3 WELL VOLUMES 5.88 Gallons
TOTAL PURGE VOLUME 12.4 Gallons

SAMPLE DATA:

SAMPLE #	VOLUME	CHECK IF FILTERED	PRES.	ANALYSIS REQUESTED
BSR-GW-01				

FIELD PARAMATERS:

TIME	Amount Purged	Temp C	pH	S.C. um/cm	EH mv	D.O. mg/l	DTW
1010	5.25	7.2	7.35	803	476.1	4.61	11.65
1014	5.5	7.1	7.33	782	475.0	4.34	11.80
1016	6.3	6.9	7.31	774	472.2	3.95	11.85
1018	7.0	6.8	7.29	772	471.7	3.91	11.87
1020	7.75	6.8	7.28	771	470.7	3.92	11.87
1022	8.5	6.8	7.28	776	469.4	3.92	11.88
FINAL FIELD PARAMETERS PRIOR TO SAMPLING							
1025	9.25	6.8	7.28	769	469.2	3.92	11.88

FIELD REMARKS: ______

Pioneer Technical Services

FIELD SAMPLE DATA SHEET

Page __ of __

Project Name: BSB Old landfill
WELL/STATION BSB- A1
DATE 4/2/13
TIME 1130
SAMPLERS DJ Renz, R. Hazlet
WEATHER CONDITIONS Sunny, 50's
PHOTO: Yes ______ No X
ROLL# —
NUMBER —

PURGE DATA:

PURGE METHOD 2" Grundfos Sub.
START PURGING 1145
PURGE RATE 0.15 GPM
RATE CHANGE 1) Time 1155 Rate 0.12
2) Time 1245 Rate 0.15
SAMPLE TIME 1322

WELL DEPTH ~~38.37~~ 57.00 DR Feet
DEPTH TO WATER 52.53 Feet
COLUMN DEPTH 14.16 Feet
CASING DIAMETER 2 Inch
PUMP SET AT 48.0 Feet
3 WELL VOLUMES 7.08 Gallons
TOTAL PURGE VOLUME 10.75 Gallons

SAMPLE DATA:

SAMPLE #	VOLUME	CHECK IF FILTERED	PRES.	ANALYSIS REQUESTED
BSB- GW-02				

FIELD PARAMATERS:

TIME	Amount Purged	Temp C	pH	S.C. um/cm	EH mv	D.O. ~~mg/l~~ %	DTW
1306	6.10	12.0	7.12	415	470.3	0.48	41.20
1310	6.5	12.1	7.12	415	465.6	0.36	41.23
1315	7.0	12.0	7.11	416	465.0	0.32	41.29
1317	7.3	11.5	7.11	420	463.1	0.30	41.33
1319	7.5	11.7	7.11	420	461.3	0.28	41.36
~~1321~~ RH	~~7.65~~	~~11.6~~	~~7.10~~	~~419~~			
FINAL FIELD PARAMETERS PRIOR TO SAMPLING							
1321	11.5	11.5	7.10	421	458.8	0.27	

FIELD REMARKS: ______

Pioneer Technical Services

FIELD SAMPLE DATA SHEET

Page __ of __

Project Name: Old Landfill

WELL/STATION BSB - A5 DATE 4/2/13 TIME 1410

SAMPLERS D. Renz, R. Hazlet WEATHER CONDITIONS Sunny, 60's

PHOTO: Yes ______ No x ROLL# — NUMBER —

PURGE DATA:

WELL DEPTH 45.60 Feet

DEPTH TO WATER 44.75 Feet

COLUMN DEPTH 0.85 Feet

CASING DIAMETER 2 Inch

PUMP SET AT Bail Feet

3 WELL VOLUMES 0.5 Gallons

TOTAL PURGE VOLUME 1.25 Gallons

PURGE METHOD Dedicated Bailer

START PURGING 1130

PURGE RATE Bail GPM

RATE CHANGE 1) Time ______ Rate ______

2) Time ______ Rate ______

SAMPLE TIME 1415

SAMPLE DATA:

SAMPLE #	VOLUME	CHECK IF FILTERED	PRES.	ANALYSIS REQUESTED
BSB-GW-03				

FIELD PARAMATERS:

TIME	Amount Purged	Temp C	pH	S.C. um/cm	EH mv	D.O. mg/l
FINAL FIELD PARAMETERS PRIOR TO SAMPLING						
1413	0.5	12.4	6.33	857	454.7	3.20

FIELD REMARKS: ______________________________

Pioneer Technical Services

FIELD SAMPLE DATA SHEET

Page __ of __

Project Name: BSB Old Landfill

WELL/STATION BSB-AGR

DATE 4/2/13 TIME 1430

SAMPLERS D. Renz, R. Hazlet

WEATHER CONDITIONS Sunny, 60's light wind

PHOTO: Yes ______ No ✓

ROLL# — NUMBER —

PURGE DATA:

PURGE METHOD Grundfos 2" submers

START PURGING 1450

PURGE RATE 100 ~~GPM~~ mL/m

RATE CHANGE 1) Time ______ Rate ______

2) Time ______ Rate ______

SAMPLE TIME 1610

WELL DEPTH 59.75 Feet

DEPTH TO WATER 51.98 Feet

COLUMN DEPTH 7.77 Feet

CASING DIAMETER 2 Inch

PUMP SET AT 58.0 Feet

3 WELL VOLUMES 3.85 Gallons

TOTAL PURGE VOLUME ~~5.75~~ 3.99 Gallons

SAMPLE DATA:

SAMPLE #	VOLUME	CHECK IF FILTERED	PRES.	ANALYSIS REQUESTED
BSB-GW-04				

FIELD PARAMATERS:

TIME	Amount Purged	Temp C	pH	S.C. um/cm	EH mv	D.O. mg/l	DTW
1558	3.55	12.9	6.14	3.66	296.9	1.45	52.94
1600	3.60	12.9	6.12	3.64	298.4	1.50	52.95
1602	3.69	12.9	6.11	3.64	299.9	1.45	53.01
1604	3.77	12.9	6.11	3.64	299.5	1.39	53.03
1606	3.85	13.0	6.11	3.64	299.2	1.35	53.04
1608	3.91	13.0	6.10	3.64	299.1	1.33	53.64
FINAL FIELD PARAMETERS PRIOR TO SAMPLING							
1610	3.99	13.0	6.10	3.64	298.9	1.33	53.06

FIELD REMARKS: ______________________________

Pioneer Technical Services

FIELD SAMPLE DATA SHEET

Page __ of __

Project Name: BSB old landfill
WELL/STATION BSB-GW-7
DATE 4/2/13
TIME 1430
SAMPLERS D.J.Rom, R.Hazlet
WEATHER CONDITIONS Sunny, 60's
PHOTO: Yes ______ No X
ROLL# —
NUMBER —

PURGE DATA:

PURGE METHOD Grundfos 2" submers
START PURGING 1450
PURGE RATE 100 ~~GPM~~ mL/min
RATE CHANGE 1) Time ______ Rate ______
2) Time ______ Rate ______
SAMPLE TIME 1610

WELL DEPTH 59.75 Feet
DEPTH TO WATER 51.98 Feet
COLUMN DEPTH 7.77 Feet
CASING DIAMETER 2 Inch
PUMP SET AT 58.0 Feet
3 WELL VOLUMES 3.85 Gallons
TOTAL PURGE VOLUME 6.73 Gallons

SAMPLE DATA: Duplicate of BSB-GW-4 Voc 40 mL glass. VOC

SAMPLE #	VOLUME	CHECK IF FILTERED	PRES.	ANALYSIS REQUESTED
BSB-GW-07				

FIELD PARAMATERS:

TIME	Amount Purged	Temp C	pH	S.C. um/cm	EH mv	D.O. mg/l
FINAL FIELD PARAMETERS PRIOR TO SAMPLING						
1610	3.99	13.0	6.10	3.64	298.9	1.33

53.0c

FIELD REMARKS: * Duplicate of DSB-GW-4 40 mL glass VOC *

FIELD SAMPLE DATA SHEET

Page 1 of 1

Project Name: BSB Old Lanfill

WELL/STATION CLK-1

DATE 04/03/13

TIME 830

SAMPLERS RH, DR

WEATHER CONDITIONS Cloudy, Calm, 45°F

PHOTO: Yes ______ No ______

ROLL# ______

NUMBER ______

PURGE DATA:

PURGE METHOD 2" Grundfos Submersible

START PURGING 926

PURGE RATE 0.5 GPM

RATE CHANGE 1) Time ______ Rate ______

2) Time ______ Rate ______

SAMPLE TIME 948

WELL DEPTH 18.94 Feet

DEPTH TO WATER 5.35 Feet

COLUMN DEPTH 13.59 Feet

CASING DIAMETER 2 Inch

PUMP SET AT 16 Feet

3 WELL VOLUMES 6.8 Gallons

TOTAL PURGE VOLUME 12.5 Gallons

SAMPLE DATA:

SAMPLE #	VOLUME	CHECK IF FILTERED	PRES.	ANALYSIS REQUESTED
BSB-GW-05				

FIELD PARAMATERS:

TIME	Amount Purged	Temp C	pH	S.C. um/cm	EH mv	D.O. mg/l
938	7.5	7.4	6.3	1879	464.2	0.24
940	8.5	7.5	6.26	1886	465.4	0.14
942	9.5	7.5	6.25	1891	466.5	0.10
944	10.5	7.5	6.25	1895	467.2	0.11
946	11.5	7.5	6.24	1899	467.1	0.12
FINAL FIELD PARAMETERS PRIOR TO SAMPLING						
948	12.5	7.5	6.24	1906	467.8	0.10

DTW

FIELD REMARKS: ______

Pioneer Technical Services

FIELD SAMPLE DATA SHEET

Page __ of __

Project Name: BSB old Lanfill

WELL/STATION CIK-2
DATE 04/03/13 TIME 1040
SAMPLERS RH, DR
WEATHER CONDITIONS Cloudy, Calm, 50 °F
PHOTO: Yes ______ No _____
ROLL# ______ NUMBER ________

PURGE DATA:

PURGE METHOD Grundfos 2" sub
START PURGING 1055
PURGE RATE 0.25 GPM
RATE CHANGE 1) Time ______ Rate ________
2) Time ______ Rate ________
SAMPLE TIME 1122

WELL DEPTH 46.9 Feet
DEPTH TO WATER 41.34 Feet
COLUMN DEPTH 5.56 Feet
CASING DIAMETER 2 Inch
PUMP SET AT 45 Feet
3 WELL VOLUMES 2.78 Gallons
TOTAL PURGE VOLUME 3.5 Gallons

SAMPLE DATA:

SAMPLE #	VOLUME	CHECK IF FILTERED	PRES.	ANALYSIS REQUESTED
BSB-GW-08				
BSB-GW-08				

FIELD PARAMATERS:

TIME	Amount Purged	Temp C	pH	S.C. um/cm	EH mv	D.O. mg/l
1110	2.0	9.9	6.30	1684	449.4	0.78
1113	2.5	9.8	6.29	1682	448.9	0.83
1116	3.0	10.0	6.29	1675	448.5	0.94
1120	3.2	10.0	6.29	1683	450.1	0.93
FINAL FIELD PARAMETERS PRIOR TO SAMPLING						
1122	3.5	9.9	6.29	1690	450.3	0.91

FIELD REMARKS: ________________________________

Pioneer Technical Services

12/05/12 BSB new Lanfill

1630 Began Purging BSB-W6 at 307 Hz, 2.25 gpm
Purged 77.5 gal

1710 Collected CL2-GW-04

1715 left Site

4/2/13 OLD landfill

0900 Arive @ MGMB 2 -

PTS crew Members: DJ Renz
Randy Hazelet

DTW: 11.45'
Total Depth: 23.20'
Column: 11.75
well ⌀ = [illegible] 2"
3 well volumes. 5.88
Total purged: 12.4 gallons
Begin purging MGMB-2 @ 0922

0924 Initial Draw Down 11.60' at 0.20 gpm

0950 Calibrate Meters ON site.
Ph 4.01 → 4.00
7.00 → 7.00
10.00
SC Callbrated @ 1413 us/cm

4/2/13 old land fill MGM6 Cont.

Meter calibration Cont.

DO 98.0 % Saturation - callibrated at 100 % Sat

EH/ORP calibrated @ 426 mV for 17.0 °C

1010 Begin collecting field parameters

1025 Collect BSB-GW-01
3 - 40mL Glass VOC HCL pres
2 - 1L Amber glass unpres PCB'S
3 - 1L Amber glass unpres Herbicides
2 1L Amber glass unpres Pesticides
2 1L Amber glass unpres SVOC
1 250 mL HDPE H_2SO_4 NO_2 - NO_3 & COD
1 500 mL HDPE NaOH & ZN Acetate Sulfide
1 250 mL HDPE Sodium Hydroxide / cyanide
1 1L HDPE unpres PH/sc/cloride/sulfate
1 250 mL HDPE HNO_3 Dissolved metals

4/2/13 old landfill

1050 stop purging MGM6-2. pull Grundfoss pump from well. Decon pump No Decon ON tubing As tubing is dedicated to MGM6 2.

Total purged 10.25 gallons

1110 ARRive at BSB - A1

PTS Samplers = DJ Renz
Dandy Hazlet

DTW 38.37'
TD: 52.53'
Column: 14.16
3 well volumes: 7.08
Total purge volume: 10.75 gallons

1130 Go over to BSB - A5 and get
DTW: 44.76
TD: 45.60
Dandy/Hazlet Begin Bailing BSB - A5
Bailed Out 1/2 gallons @ 1200
well left to Recover and to be Sampled later in the afternoon.

4/2/13 old Landfill

1145 Begin purgin BSB- A1 @ 1/2 quart per min
Initial Draw Down 38.81'

1245 Increase pumping Rate from 0.2 to 0.5 gpm

1245 water from BSB-GW-02 Is clear w no visible Turbidity.

1300 Begin collecting field parameters

1322 collect BSB-GW-02

3·40mL glass HCl pres.
1-500mL HDPE NaOH & Zinc Acetate - Sulfide
1-1L HDPE unpres pH, SC, chloride, sulfate
1-250mL HDPE NO_2-NO_3 & COD H_2SO_4 pres
1-250mL HDPE NaOH Cyanide
2-1L Amberglass unpres pesticides
3-1L Amberglass unpres Herbisides
2-1L Amberglass unpres PCB'S
2-1L Amberglass unpres SVOC'S

4/2/13 old Landfill

1355 Stop purging BSB - A1 pull pump and Decon pump. No Decon on tubing, BSB-A1 has Dedicated tubing.

1410 ARRIVE Back at BSB-A5

1412 Grab Sample with Bailer and record field Parameters. Water Dirty w/ silt

1415 Sample BSB-GW-03

3·40mL glass HCL - VOC
3-1L Amberglass unpres Herbicides
2 1L Amberglass unpres PCB'S
2 1L Amberglass unpres Pesticides
2 1L Amberglass unpres SVOC'S
1-1L HDPE unpres pH, SC, Chloride, sulfate
1-500mL HDPE NaOH & Zinc Acetate - Sulfide
1-250mL HDPE H_2SO_4 - NO_2+NO_3 & COD
1·250mL HDPE NaOH - Cyanide

1600 Stop Bailing BSB-A5 place Bailer In well above water Approx 20'

Cont. →

4/2/13 old landfill

Above water level in well so No DTW Readings Conducted In the future would Be affected By the Bailer In the water.

Total Volume purged: 1.25 gallons

1433 Arrive at **BSB - AGR**

DTW = 51.98'
TD = 59.75'
Column = 7.77
Casing = 2"
3 well volumes: 3.88 gallons
Total volume purge:

1450 Begin purging BSB - AGR @ 100 mL/min Initial Draw Down 52.36'

1610 collect BSB - GW - 04

3-40 ml glass VOC - HCL
1-1L Amberglass Unpres Herbicides
2 1L Amberglass unpres Pesticides
2 1L Amberglass unpres PCB's
2 1L Amber glass SVOC's unpres
1 500 mL HDPE - NaOH & zinc Acetate - Sulfide
1 250 mL HDPE - NO2+NO3 + COD H2SO4 pres
1 - 1L unpres HDPE pH, SC, chloride, sulfate
1 250 ml HDPE cyanide NaOH.

Also collect BSB - GW - 07 Duplicate of BSB - GW - 04 VOC 40 mL glass

Collected @ 1610
3 - 40 mL glass VOC - HCL

1650 Stop purging BSB - AGR All purge water collected In purge JUG and took to Lower Area one for treatment.

4/2/13 old landfill

1700 Decon pump No Decon on tubing used Dedicated old landfill tubeing.

~~1815~~ 1715 PTS off site

Final Field Perameters:

BSB-A6R - BSB-GW-4

PH	SC	EH	DO	Time	Temp	DTW
6.10	3.64	298.9	1.33	1610	13.0°C	53.00

- Same final field Perameters for BSB-GW-7 which was a duplicate of BSB-GW-4 VOC 40 ml glass.

BSB-A5 - BSB-GW-3

PH	SC	EH	DO	Time	Temp	Amount purged
6.33	857	454.7	3.20	1413	12.4°C	0.5 gallons

BSB-A1 - BSB-GW-02

PH	SC	EH	DO	Temp	Time	DTW
7.10	421	458.8	0.27	11.5°C	1321	41.30

4/2/13 old landfill

Final field perameters

MUMB-2 - BSB-GW-1

PH	SC	EH	DO	Time	Temp	DTW
7.28	769	469.2	3.92	1025	6.8°C	11.38'

4. 2. 2013

4/03/13 BSB OLd Land..
830 - Arrived on site to CLK-1
DTW - 5.35' TD - 18.15
3 well volume ≅ 6.8 gal

Safety Topics - slips and trips
on uneven surfaces

926 RH
~~905~~ Begin purging CLK-1
at 0.5 GPM

Calibration

V RH
Calibrated at 428 RMS @ 15°C EH
PH: ~~8~~ 6.99 → 7.0
4.0 → 4.01
10.0 → 10.01
SC: 1413 @ 9.3°C
DO: Cal at 100% saturation

Initial drawdown 5.80'

948 Collected samples for
BSB-GW-05

1000 left CLK-1

35 Arrived to CLK-2
DTW - 41.34 TD - 46.90'
umn Depth - 5.56'
well volume - 2.78 gal

55 began purging CLK-2 at

Initial Drawdown 42.5'

52 Collected Sample BSB-GW-0
nd BSB-GW-08

left site

Sample BSB-GW-09 (Blank)

1 250mL HNO3 Dissolved metals HDPE
1L HDPE unpres PH, SC chloride, sulfate

631 Total volume purged from
clark #1 = 12.5 gallons
total volume pulgeld from clark #2
7.5 gallons

Cont →

Arrived at [illegible]
W-11 [illegible] T.D. - 42.71
and DTW - 5.58
well volume = 2.79 gal

1255 Begin Purge [illegible]

[illegible]

[illegible] Collected sample [illegible]
[illegible]

[illegible]

[illegible] Bot-GW-09 [illegible]

[illegible]

Total volume purged from
[illegible]
[illegible]

Cont →

[illegible] at [illegible]
[illegible]
[illegible]

[illegible] and [illegible]
[illegible]

[illegible] Begin Purging [illegible]
WL - 8.5 [illegible]

[illegible]

Collected sample [illegible]
[illegible]

[illegible]

Initial drawdown = 8.3'

[illegible] Collected sample for
Bot-GW-09

1410 [illegible] CLR-1

4/3/12 old landfill

Final field parameters

Clark # 1

PH	SC	EH	DO mg/L	Time	Temp
6.24	1906	467.8	0.10	0948	7.5

Clark # 2

PH	SC	EH MV	DO mg/L	Time	Temp
6.29	1690	450.3	0.91	1122	9.9

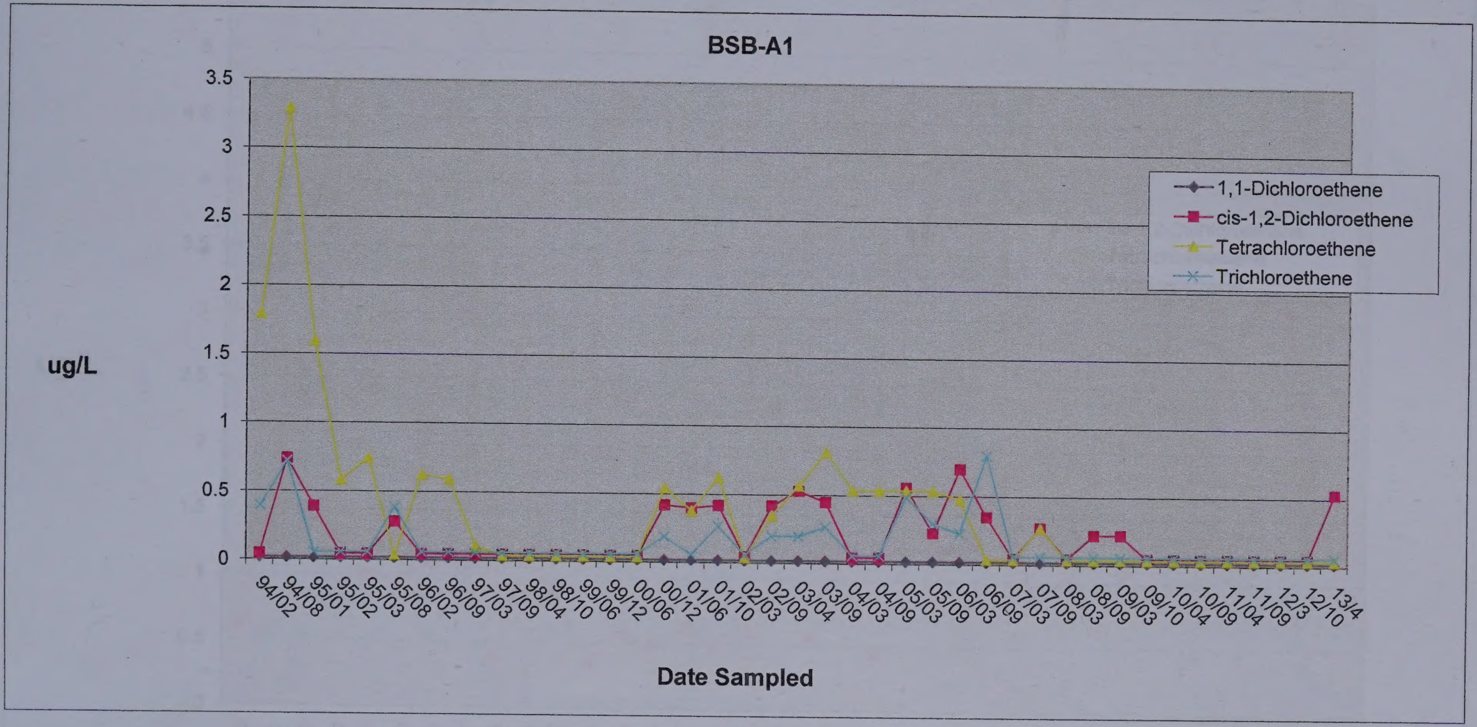
* Also a duplicated of clark #2 samples were ~~pulled~~ collected and labeled BSB - GW - 08

1 - 250 mL HDPE Dissloved metals
1 - 1L HDPE Unpres PH, SC, cloride, Sulfate.

1535 All samples for Both the old landfill sample wells MGMG-2 BSB-A1, BSB-A5, BSB-A6R and Clark well # 1 & 2 were Delivered to fedex for shipment to pace.

4/3/13 old landfill / clark tailings
1545 All purge water contained in purge containers and Dumped at lower Area one.

4/3/13


BSB-A1
ug/L
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3
2.5
2
1.5
1
0.5
0
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cis-1,2-Dichloroethene
Tetrachloroethene
Trichloroethene
94/02
94/08
95/01
95/02
95/03
95/08
96/02
96/09
97/03
97/09
98/04
98/10
99/06
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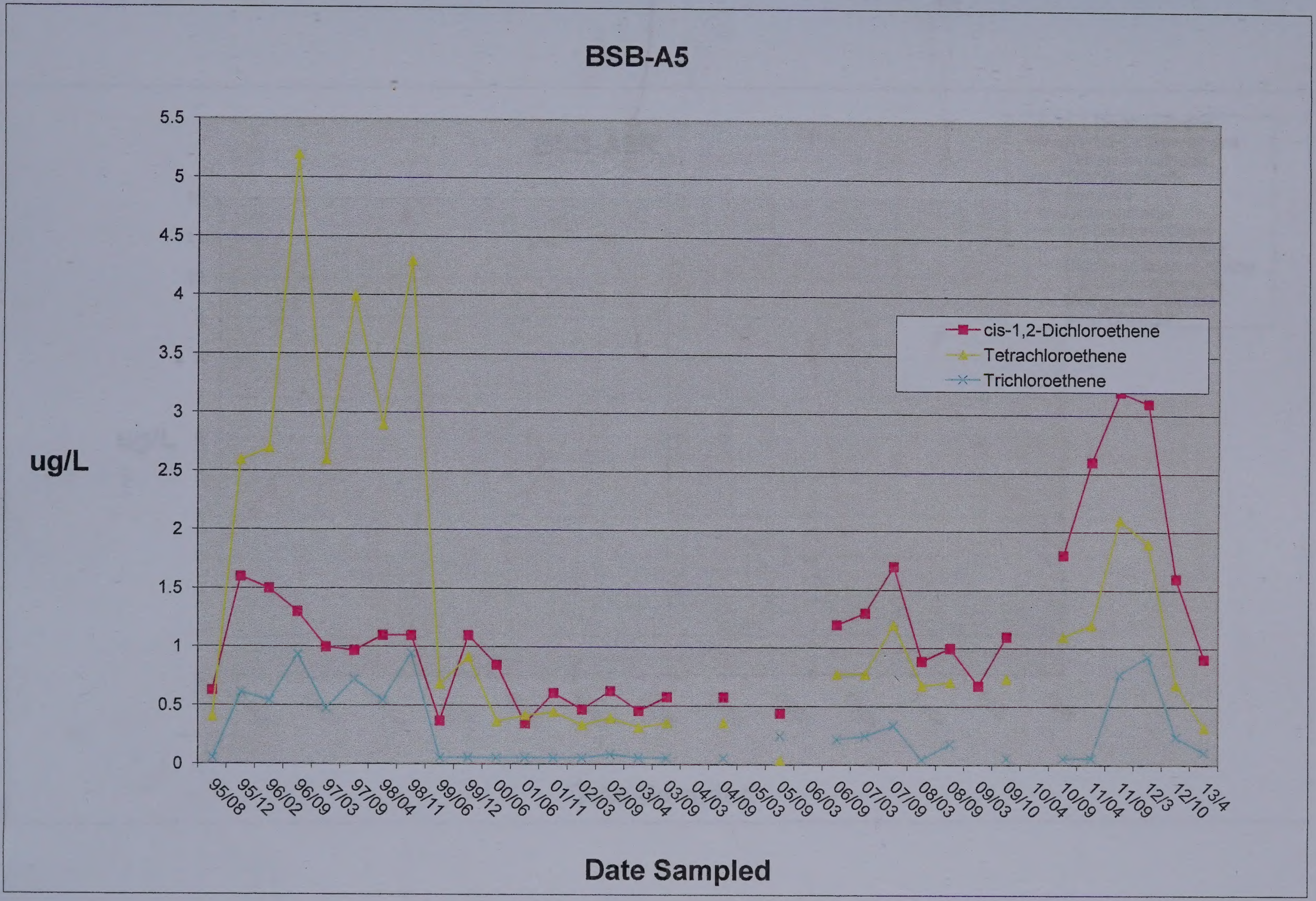
12/3
12/10
13/4
Date Sampled


BSB-A5
ug/L
5.5
5
4.5
4
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3
2.5
2
1.5
1
0.5
0
95/08
95/12
96/02
96/09
97/03
97/09
98/04
98/11
99/06
99/12
00/06
01/06
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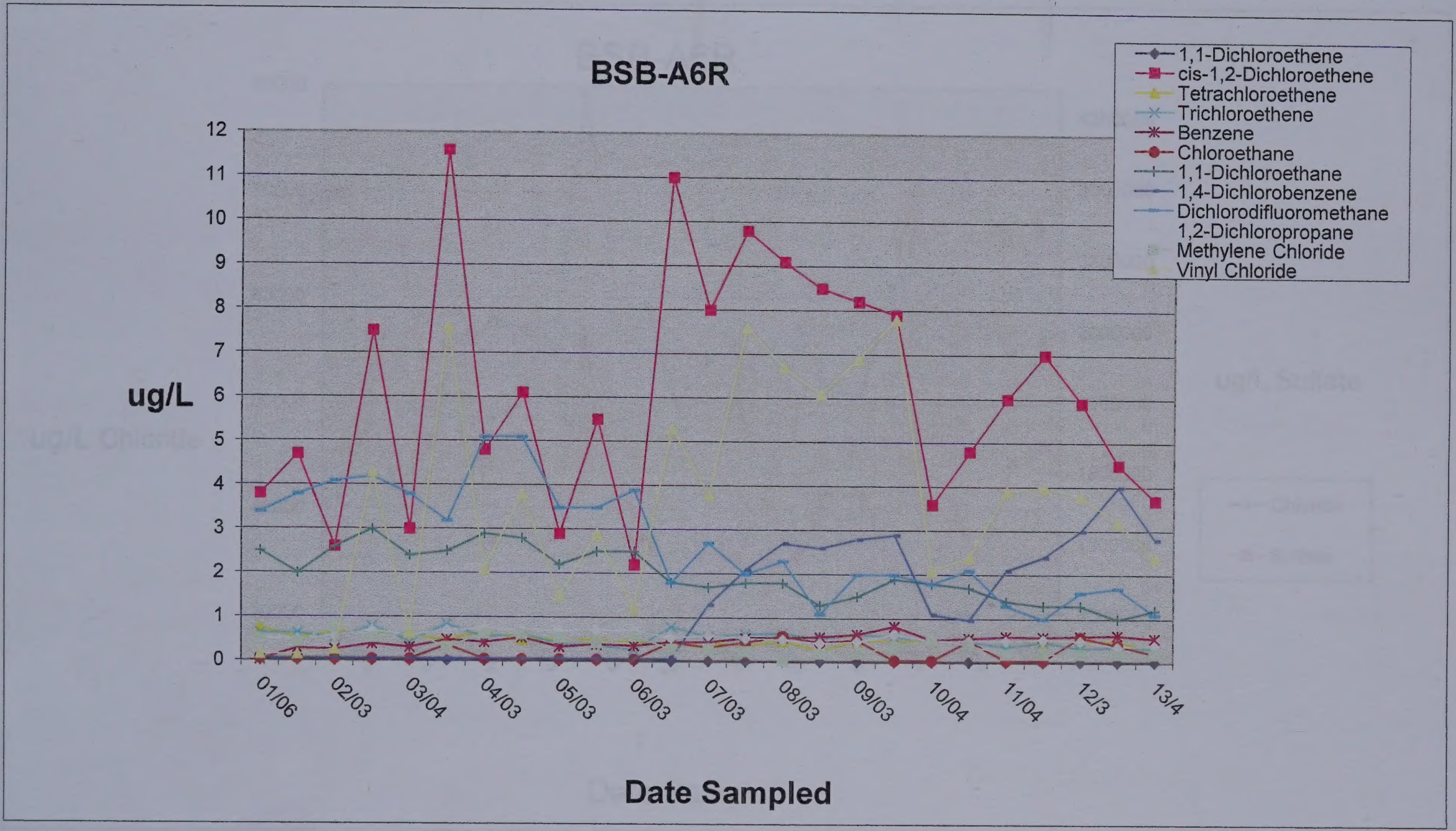
10/04
10/09
11/04
11/09
12/3
12/10
13/4
Date Sampled
cis-1,2-Dichloroethene
Tetrachloroethene
Trichloroethene


BSB-A6R
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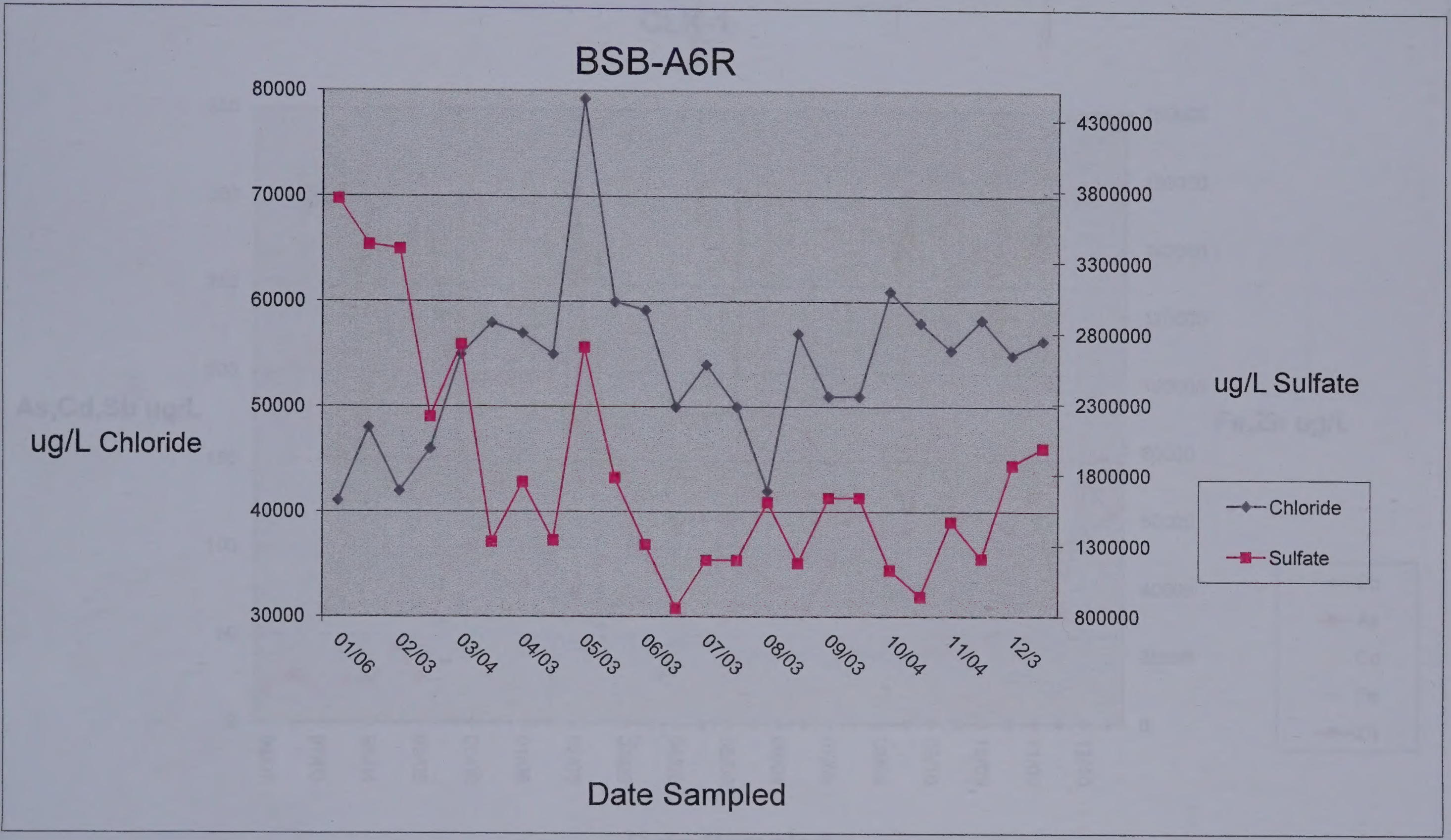
cis-1,2-Dichloroethene
Tetrachloroethene
Trichloroethene
Benzene
Chloroethane
1,1-Dichloroethane
1,4-Dichlorobenzene
Dichlorodifluoromethane
1,2-Dichloropropane
Methylene Chloride
Vinyl Chloride
ug/L
12
11
10
9
8
7
6
5
4
3
2
1
0
01/06
02/03
03/04
04/03
05/03
06/03
07/03
08/03
09/03
10/04
11/04
12/3
13/4
Date Sampled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50000
40000
30000
ug/L Sulfate
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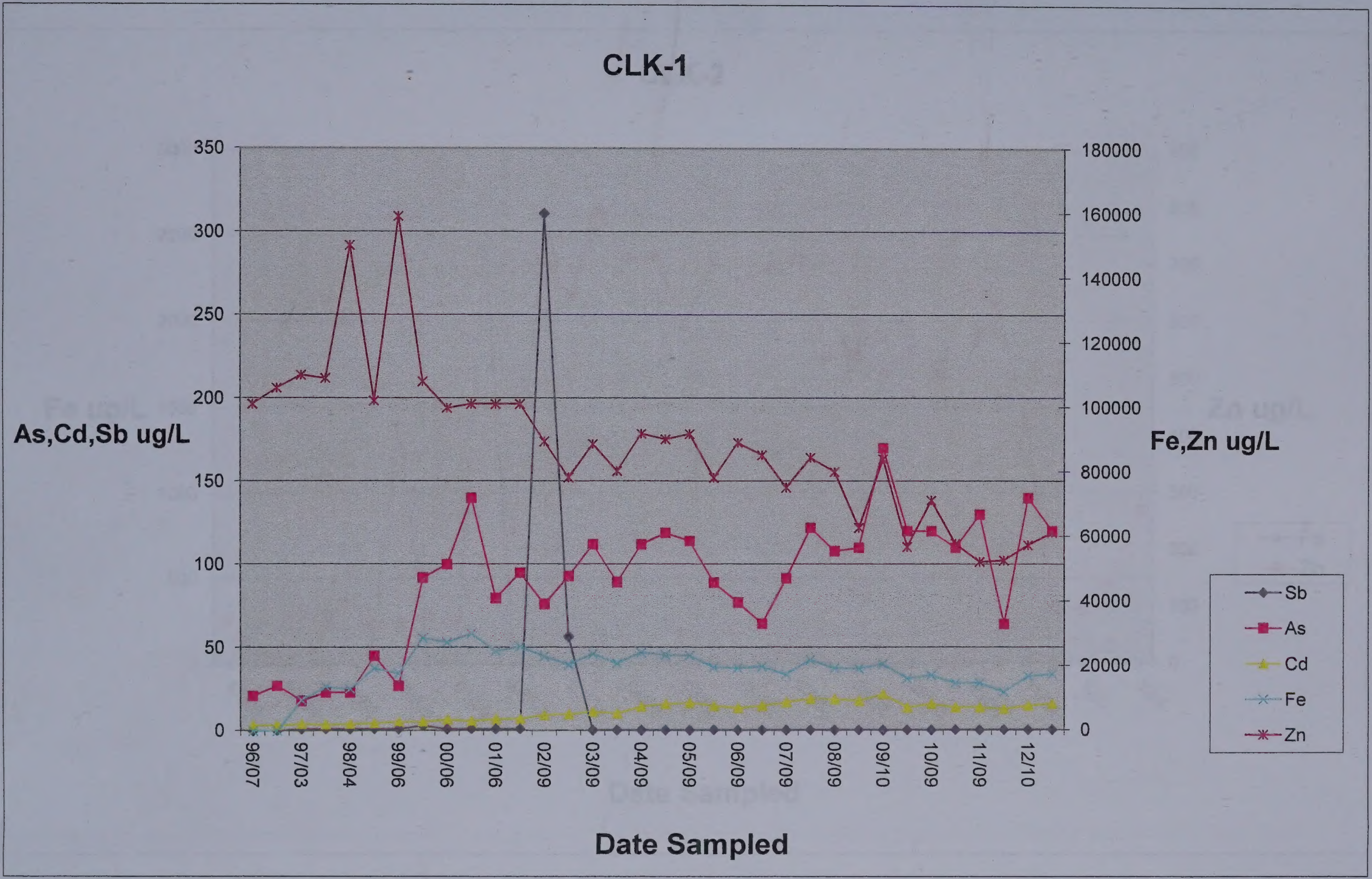
2300000
1800000
1300000
800000
01/06
02/03
03/04
04/03
05/03
06/03
07/03
08/03
09/03
10/04
11/04
12/3
Date Sampled
Chloride
Sulfate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350
300
250
200
150
100
50
0
Fe,Zn ug/L
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
96/07
97/03
98/04
99/06
00/06
01/06
02/09
03/09
04/09
05/09
06/09
07/09
08/09
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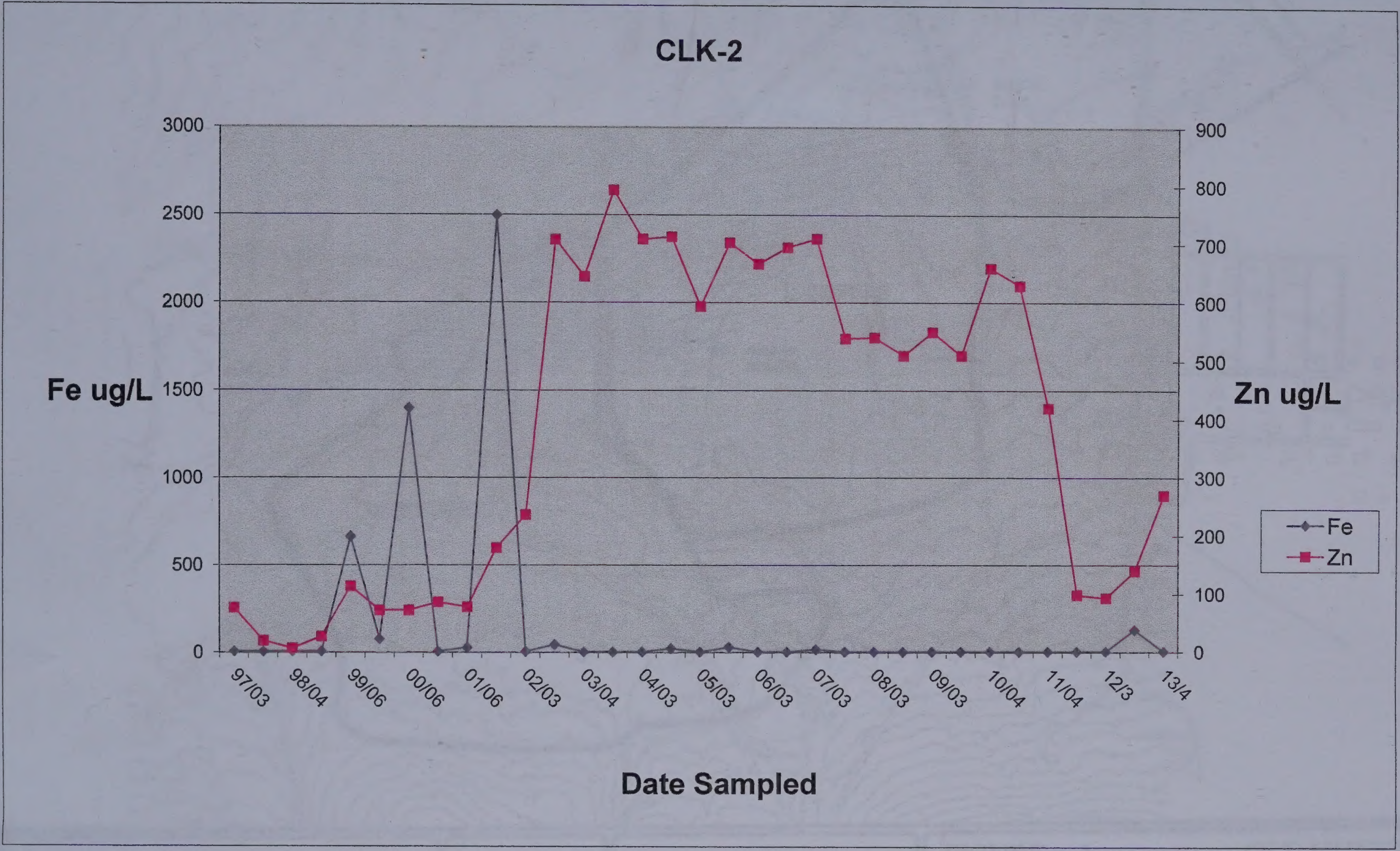
12/10
Date Sampled
Sb
As
Cd
Fe
Zn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Fe ug/L
Zn ug/L
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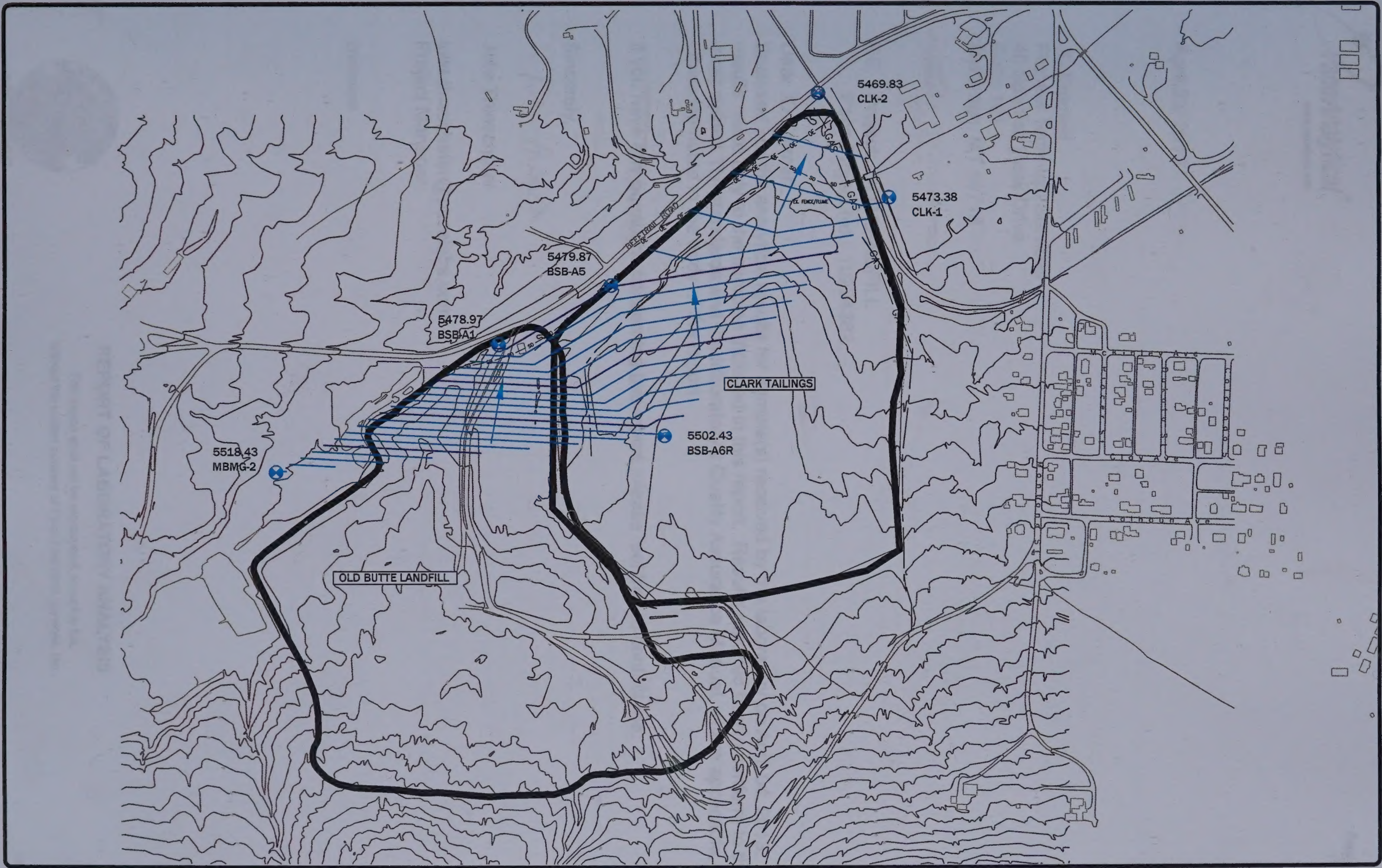
2500
2000
1500
1000
500
0
900
800
700
600
500
400
300
200
100
0
97/03
98/04
99/06
00/06
01/06
02/03
03/04
04/03
05/03
06/03
07/03
08/03
09/03
10/04
11/04
12/3
13/4
Fe
Zn
Date Sampled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CLK-2
5473.38
CLK-1
5479.87
BSB-A5
5478.97
BSB-A1
5518.43
MBMG-2
5502.43
BSB-A6R
CLARK TAILINGS
OLD BUTTE LANDFILL
BEEF TRAIL ROAD
GAS
CLAY AVE
Calhoun Ave

LEGEND

CLK-1 ● MONITORING WELL

—— CONTOUR

CONTOUR INTERVAL= 10'

N

	DISPLAYED AS:
COORD SYS/ZONE:	NA
DATUM:	NA
UNITS:	FEET
SOURCE:	PIONEER

SCALE IN FEET
0 300 600

FIGURE 1

OLD MUNICIPAL LANDFILL SITE/CLARK TAILINGS FACILITY
APRIL 2013

PIONEER
TECHNICAL SERVICES, INC.
63-1/2 WEST BROADWAY
BUTTE, MONTANA 59701
(406) 782-5177

DATE: 6/4/13

6/4/2013 1:51:56 PM P:\BUTTE-SILVER BOW\BSB OLD LANDFILL\OLD LANDFILL\2013\OLDLNDFL-FG-PLN-001-13.DWG

Pace Analytical®
www.pacelabs.com

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

April 23, 2013

JD Emmert
Pioneer Technical Services
40 Spanish Peak Drive
Suite 101
Bozeman, MT 59718

RE: Project: OLD LANDFILL
Pace Project No.: 10224382

Dear JD Emmert:

Enclosed are the analytical results for sample(s) received by the laboratory on April 04, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Julie Thieschafer

julie.thieschafer@pacelabs.com
Project Manager

Enclosures

CERTIFICATIONS

Project: OLD LANDFILL
Pace Project No.: 10224382

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Arizona Certification #: AZ0735
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Massachusetts Certification #: M-FL1264
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nevada Certification: FL NELAC Reciprocity
New Hampshire Certification #: 2958
New Jersey Certification #: FL765
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
Pace Analytical Services - Ormond certification number E83509
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Washington Certification #: C955
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 11888
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

SAMPLE SUMMARY

Project: OLD LANDFILL
Pace Project No.: 10224382

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10224382001	**BSB-GW-01**	Water	04/02/13 10:25	04/04/13 09:14
10224382002	**BSB-GW-02**	Water	04/02/13 13:22	04/04/13 09:14
10224382003	**BSB-GW-03**	Water	04/02/13 14:15	04/04/13 09:14
10224382004	**BSB-GW-04**	Water	04/02/13 16:10	04/04/13 09:14
10224382005	**BSB-GW-07**	Water	04/02/13 16:10	04/04/13 09:14
10224382006	**TRIP BLANK**	Water	04/02/13 00:00	04/04/13 09:14

SAMPLE ANALYTE COUNT

Project: OLD LANDFILL
Pace Project No.: 10224382

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10224382001	**BSB-GW-01**	EPA 8082	KL1	11	PASI-M
		EPA 8151	LJM	12	PASI-O
		EPA 200.8	TT3	16	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 8260	DJT	54	PASI-M
		SM 4500-S F (2000)	DEY	1	PASI-G
		EPA 353.2	KEO	1	PASI-M
		EPA 410.4	KEO	1	PASI-M
		SM 4500-CN-E	PH1	1	PASI-M
10224382002	**BSB-GW-02**	EPA 8082	KL1	11	PASI-M
		EPA 8151	LJM	12	PASI-O
		EPA 8260	DJT	54	PASI-M
		SM 4500-S F (2000)	DEY	1	PASI-G
		EPA 353.2	KEO	1	PASI-M
		EPA 410.4	KEO	1	PASI-M
		SM 4500-CN-E	PH1	1	PASI-M
10224382003	**BSB-GW-03**	EPA 8082	KL1	11	PASI-M
		EPA 8151	LJM	12	PASI-O
		EPA 8260	DJT	54	PASI-M
		SM 4500-S F (2000)	DEY	1	PASI-G
		EPA 353.2	KEO	1	PASI-M
		EPA 410.4	KEO	1	PASI-M
		SM 4500-CN-E	PH1	1	PASI-M
10224382004	**BSB-GW-04**	EPA 8082	KL1	11	PASI-M
		EPA 8151	LJM	12	PASI-O
		EPA 8260	DJT	54	PASI-M
		SM 4500-S F (2000)	DEY	1	PASI-G
		EPA 353.2	KEO	1	PASI-M
		EPA 410.4	KEO	1	PASI-M
		SM 4500-CN-E	PH1	1	PASI-M
10224382005	**BSB-GW-07**	EPA 8260	DJT	54	PASI-M
10224382006	**TRIP BLANK**	EPA 8260	DJT	54	PASI-M

PROJECT NARRATIVE

Project:	OLD LANDFILL
Pace Project No.:	10224382

Method:	**EPA 8082**
Description:	8082 GCS PCB
Client:	BPAR-PIONEER-MT
Date:	April 23, 2013

General Information:
4 samples were analyzed for EPA 8082. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: GCSV/11091

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

PROJECT NARRATIVE

Project: OLD LANDFILL
Pace Project No.: 10224382

Method: **EPA 8151**
Description: 8151 Chlorinated Herbicides
Client: BPAR-PIONEER-MT
Date: April 23, 2013

General Information:
4 samples were analyzed for EPA 8151. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8151 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/12219

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60141644004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 601017)
  - Dicamba

Additional Comments:

PROJECT NARRATIVE

Project: OLD LANDFILL
Pace Project No.: 10224382

Method: **EPA 200.8**
Description: 200.8 MET ICPMS, Dissolved
Client: BPAR-PIONEER-MT
Date: April 23, 2013

General Information:
1 sample was analyzed for EPA 200.8. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 200.8 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: OLD LANDFILL
Pace Project No.: 10224382

Method: **EPA 245.1**
Description: 245.1 Mercury, Dissolved
Client: BPAR-PIONEER-MT
Date: April 23, 2013

General Information:
1 sample was analyzed for EPA 245.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	OLD LANDFILL
Pace Project No.:	10224382

Method: **EPA 8260**
Description: 8260 MSV
Client: BPAR-PIONEER-MT
Date: April 23, 2013

General Information:
6 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: OLD LANDFILL
Pace Project No.: 10224382

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: BPAR-PIONEER-MT
Date: April 23, 2013

General Information:
4 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

P4: Sample field preservation does not meet EPA or method recommendations for this analysis.
- BSB-GW-04 (Lab ID: 10224382004)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	OLD LANDFILL
Pace Project No.:	10224382

Method: **EPA 353.2**
Description: 353.2 Nitrate + Nitrite pres.
Client: BPAR-PIONEER-MT
Date: April 23, 2013

General Information:
4 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: OLD LANDFILL
Pace Project No.: 10224382

Method: **EPA 410.4**
Description: 410.4 COD
Client: BPAR-PIONEER-MT
Date: April 23, 2013

General Information:
4 samples were analyzed for EPA 410.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	OLD LANDFILL
Pace Project No.:	10224382

Method:	**SM 4500-CN-E**
Description:	SM4500CN-E Cyanide
Client:	BPAR-PIONEER-MT
Date:	April 23, 2013

General Information:
4 samples were analyzed for SM 4500-CN-E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-01 **Lab ID: 10224382001** Collected: 04/02/13 10:25 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	ND	ug/L	0.10	0.045	1	04/08/13 07:19	04/09/13 15:58	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.10	0.039	1	04/08/13 07:19	04/09/13 15:58	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.10	0.029	1	04/08/13 07:19	04/09/13 15:58	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.10	0.040	1	04/08/13 07:19	04/09/13 15:58	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.10	0.029	1	04/08/13 07:19	04/09/13 15:58	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.10	0.039	1	04/08/13 07:19	04/09/13 15:58	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.10	0.028	1	04/08/13 07:19	04/09/13 15:58	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/L	0.10	0.017	1	04/08/13 07:19	04/09/13 15:58	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/L	0.10	0.021	1	04/08/13 07:19	04/09/13 15:58	11100-14-4	
Surrogates									
Tetrachloro-m-xylene (S)	69	%	39-125		1	04/08/13 07:19	04/09/13 15:58	877-09-8	
Decachlorobiphenyl (S)	83	%	30-125		1	04/08/13 07:19	04/09/13 15:58	2051-24-3	
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151								
Bentazon	ND	ug/L	0.098	0.017	1	04/08/13 08:00	04/09/13 18:53	25057-89-0	
2,4-D	ND	ug/L	0.98	0.23	1	04/08/13 08:00	04/09/13 18:53	94-75-7	
Dalapon	ND	ug/L	0.95	0.45	1	04/08/13 08:00	04/09/13 18:53	75-99-0	
2,4-DB	ND	ug/L	2.0	0.53	1	04/08/13 08:00	04/09/13 18:53	94-82-6	
Dicamba	ND	ug/L	0.098	0.031	1	04/08/13 08:00	04/09/13 18:53	1918-00-9	
Dichlorprop	ND	ug/L	0.68	0.20	1	04/08/13 08:00	04/09/13 18:53	120-36-5	
Dinoseb	ND	ug/L	0.20	0.059	1	04/08/13 08:00	04/09/13 18:53	88-85-7	
Pentachlorophenol	ND	ug/L	0.030	0.018	1	04/08/13 08:00	04/09/13 18:53	87-86-5	
Picloram	**0.23**	ug/L	0.098	0.020	1	04/08/13 08:00	04/09/13 18:53	1918-02-1	
2,4,5-T	ND	ug/L	0.20	0.044	1	04/08/13 08:00	04/09/13 18:53	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	0.20	0.051	1	04/08/13 08:00	04/09/13 18:53	93-72-1	
Surrogates									
2,4-DCAA (S)	124	%	42-142		1	04/08/13 08:00	04/09/13 18:53	19719-28-9	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony, Dissolved	**0.00013J**	mg/L	0.00050	0.000056	1	04/07/13 08:54	04/07/13 18:04	7440-36-0	
Arsenic, Dissolved	**0.0011**	mg/L	0.00050	0.000093	1	04/07/13 08:54	04/07/13 18:04	7440-38-2	
Barium, Dissolved	**0.13**	mg/L	0.00030	0.00014	1	04/07/13 08:54	04/07/13 18:04	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.00020	0.000053	1	04/07/13 08:54	04/07/13 18:04	7440-41-7	
Cadmium, Dissolved	ND	mg/L	0.000080	0.000032	1	04/07/13 08:54	04/07/13 18:04	7440-43-9	
Chromium, Dissolved	**0.0016**	mg/L	0.00050	0.000081	1	04/07/13 08:54	04/07/13 18:04	7440-47-3	
Cobalt, Dissolved	**0.00079**	mg/L	0.00050	0.000052	1	04/07/13 08:54	04/07/13 18:04	7440-48-4	
Copper, Dissolved	**0.0038**	mg/L	0.00050	0.00017	1	04/07/13 08:54	04/07/13 18:04	7440-50-8	
Iron, Dissolved	ND	mg/L	0.050	0.0059	1	04/07/13 08:54	04/07/13 18:04	7439-89-6	
Lead, Dissolved	**0.000063J**	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/07/13 18:04	7439-92-1	
Nickel, Dissolved	**0.00027J**	mg/L	0.00050	0.00015	1	04/07/13 08:54	04/07/13 18:04	7440-02-0	
Selenium, Dissolved	**0.00095**	mg/L	0.00050	0.00012	1	04/07/13 08:54	04/07/13 18:04	7782-49-2	
Silver, Dissolved	**0.000058J**	mg/L	0.00050	0.000050	1	04/07/13 08:54	04/09/13 17:08	7440-22-4	
Thallium, Dissolved	ND	mg/L	0.00010	0.000025	1	04/07/13 08:54	04/07/13 18:04	7440-28-0	
Vanadium, Dissolved	**0.0067**	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/07/13 18:04	7440-62-2	
Zinc, Dissolved	**0.0015J**	mg/L	0.0050	0.00098	1	04/07/13 08:54	04/07/13 18:04	7440-66-6	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-01 Lab ID: **10224382001** Collected: 04/02/13 10:25 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury, Dissolved	ND	mg/L	0.00020	0.000030	1	04/08/13 08:29	04/09/13 12:54	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	10.0	1		04/05/13 23:30	67-64-1	
Acetonitrile	ND	ug/L	100	50.0	1		04/05/13 23:30	75-05-8	
Benzene	ND	ug/L	1.0	0.062	1		04/05/13 23:30	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.32	1		04/05/13 23:30	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		04/05/13 23:30	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		04/05/13 23:30	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		04/05/13 23:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	2.5	1		04/05/13 23:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	0.50	1		04/05/13 23:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		04/05/13 23:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		04/05/13 23:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.22	1		04/05/13 23:30	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/05/13 23:30	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		04/05/13 23:30	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		04/05/13 23:30	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		04/05/13 23:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		04/05/13 23:30	106-93-4	
Dibromomethane	ND	ug/L	4.0	0.21	1		04/05/13 23:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		04/05/13 23:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		04/05/13 23:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		04/05/13 23:30	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	10.0	0.32	1		04/05/13 23:30	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/05/13 23:30	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		04/05/13 23:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		04/05/13 23:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		04/05/13 23:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		04/05/13 23:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		04/05/13 23:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		04/05/13 23:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		04/05/13 23:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		04/05/13 23:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.081	1		04/05/13 23:30	100-41-4	
2-Hexanone	ND	ug/L	5.0	2.5	1		04/05/13 23:30	591-78-6	
Iodomethane	ND	ug/L	4.0	1.1	1		04/05/13 23:30	74-88-4	
Methylene Chloride	ND	ug/L	4.0	2.0	1		04/05/13 23:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	2.5	1		04/05/13 23:30	108-10-1	
Styrene	ND	ug/L	1.0	0.060	1		04/05/13 23:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		04/05/13 23:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		04/05/13 23:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		04/05/13 23:30	127-18-4	
Toluene	ND	ug/L	1.0	0.077	1		04/05/13 23:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		04/05/13 23:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		04/05/13 23:30	79-00-5	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-01 **Lab ID: 10224382001** Collected: 04/02/13 10:25 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Trichloroethene	ND	ug/L	1.0	0.083	1		04/05/13 23:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		04/05/13 23:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		04/05/13 23:30	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.44	1		04/05/13 23:30	108-05-4	
Vinyl chloride	ND	ug/L	0.40	0.16	1		04/05/13 23:30	75-01-4	
Xylene (Total)	**0.25J**	ug/L	3.0	0.22	1		04/05/13 23:30	1330-20-7	
m&p-Xylene	**0.25J**	ug/L	2.0	0.11	1		04/05/13 23:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.10	1		04/05/13 23:30	95-47-6	
Surrogates									
1,2-Dichloroethane-d4 (S)	97	%	75-125		1		04/05/13 23:30	17060-07-0	
Toluene-d8 (S)	100	%	75-125		1		04/05/13 23:30	2037-26-5	
4-Bromofluorobenzene (S)	100	%	75-125		1		04/05/13 23:30	460-00-4	
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		04/08/13 11:23		
353.2 Nitrate + Nitrite pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**8.3**	mg/L	0.20	0.040	2		04/10/13 15:16		
410.4 COD	Analytical Method: EPA 410.4								
Chemical Oxygen Demand	ND	mg/L	50.0	25.0	1		04/17/13 12:29		
SM4500CN-E Cyanide	Analytical Method: SM 4500-CN-E								
Cyanide	**8.7J**	ug/L	10.0	5.0	1		04/09/13 11:42	57-12-5	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-02 Lab ID: **10224382002** Collected: 04/02/13 13:22 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	ND	ug/L	0.10	0.044	1	04/08/13 07:19	04/09/13 16:14	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.10	0.038	1	04/08/13 07:19	04/09/13 16:14	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.10	0.029	1	04/08/13 07:19	04/09/13 16:14	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.10	0.039	1	04/08/13 07:19	04/09/13 16:14	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.10	0.029	1	04/08/13 07:19	04/09/13 16:14	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.10	0.038	1	04/08/13 07:19	04/09/13 16:14	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.10	0.028	1	04/08/13 07:19	04/09/13 16:14	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/L	0.10	0.016	1	04/08/13 07:19	04/09/13 16:14	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/L	0.10	0.021	1	04/08/13 07:19	04/09/13 16:14	11100-14-4	
Surrogates									
Tetrachloro-m-xylene (S)	68	%	39-125		1	04/08/13 07:19	04/09/13 16:14	877-09-8	
Decachlorobiphenyl (S)	85	%	30-125		1	04/08/13 07:19	04/09/13 16:14	2051-24-3	
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151								
Bentazon	ND	ug/L	0.098	0.017	1	04/08/13 08:00	04/09/13 19:24	25057-89-0	
2,4-D	ND	ug/L	0.98	0.23	1	04/08/13 08:00	04/09/13 19:24	94-75-7	
Dalapon	ND	ug/L	0.95	0.45	1	04/08/13 08:00	04/09/13 19:24	75-99-0	
2,4-DB	ND	ug/L	2.0	0.53	1	04/08/13 08:00	04/09/13 19:24	94-82-6	
Dicamba	ND	ug/L	0.098	0.031	1	04/08/13 08:00	04/09/13 19:24	1918-00-9	
Dichlorprop	ND	ug/L	0.68	0.20	1	04/08/13 08:00	04/09/13 19:24	120-36-5	
Dinoseb	ND	ug/L	0.20	0.059	1	04/08/13 08:00	04/09/13 19:24	88-85-7	
Pentachlorophenol	ND	ug/L	0.030	0.018	1	04/08/13 08:00	04/09/13 19:24	87-86-5	
Picloram	**0.10**	ug/L	0.098	0.020	1	04/08/13 08:00	04/09/13 19:24	1918-02-1	
2,4,5-T	ND	ug/L	0.20	0.044	1	04/08/13 08:00	04/09/13 19:24	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	0.20	0.051	1	04/08/13 08:00	04/09/13 19:24	93-72-1	
Surrogates									
2,4-DCAA (S)	116	%	42-142		1	04/08/13 08:00	04/09/13 19:24	19719-28-9	
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	10.0	1		04/05/13 23:54	67-64-1	
Acetonitrile	ND	ug/L	100	50.0	1		04/05/13 23:54	75-05-8	
Benzene	ND	ug/L	1.0	0.062	1		04/05/13 23:54	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.32	1		04/05/13 23:54	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		04/05/13 23:54	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		04/05/13 23:54	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		04/05/13 23:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	2.5	1		04/05/13 23:54	78-93-3	
Carbon disulfide	ND	ug/L	1.0	0.50	1		04/05/13 23:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		04/05/13 23:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		04/05/13 23:54	108-90-7	
Chloroethane	ND	ug/L	1.0	0.22	1		04/05/13 23:54	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/05/13 23:54	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		04/05/13 23:54	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		04/05/13 23:54	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		04/05/13 23:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		04/05/13 23:54	106-93-4	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-02 **Lab ID: 10224382002** Collected: 04/02/13 13:22 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dibromomethane	ND	ug/L	4.0	0.21	1		04/05/13 23:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		04/05/13 23:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		04/05/13 23:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		04/05/13 23:54	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	10.0	0.32	1		04/05/13 23:54	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/05/13 23:54	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		04/05/13 23:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		04/05/13 23:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		04/05/13 23:54	75-35-4	
cis-1,2-Dichloroethene	**0.53J**	ug/L	1.0	0.085	1		04/05/13 23:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		04/05/13 23:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		04/05/13 23:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		04/05/13 23:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		04/05/13 23:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.081	1		04/05/13 23:54	100-41-4	
2-Hexanone	ND	ug/L	5.0	2.5	1		04/05/13 23:54	591-78-6	
Iodomethane	ND	ug/L	4.0	1.1	1		04/05/13 23:54	74-88-4	
Methylene Chloride	ND	ug/L	4.0	2.0	1		04/05/13 23:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	2.5	1		04/05/13 23:54	108-10-1	
Styrene	ND	ug/L	1.0	0.060	1		04/05/13 23:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		04/05/13 23:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		04/05/13 23:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		04/05/13 23:54	127-18-4	
Toluene	ND	ug/L	1.0	0.077	1		04/05/13 23:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		04/05/13 23:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		04/05/13 23:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.083	1		04/05/13 23:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		04/05/13 23:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		04/05/13 23:54	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.44	1		04/05/13 23:54	108-05-4	
Vinyl chloride	ND	ug/L	0.40	0.16	1		04/05/13 23:54	75-01-4	
Xylene (Total)	**0.22J**	ug/L	3.0	0.22	1		04/05/13 23:54	1330-20-7	
m&p-Xylene	**0.18J**	ug/L	2.0	0.11	1		04/05/13 23:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.10	1		04/05/13 23:54	95-47-6	
Surrogates									
1,2-Dichloroethane-d4 (S)	97	%	75-125		1		04/05/13 23:54	17060-07-0	
Toluene-d8 (S)	99	%	75-125		1		04/05/13 23:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%	75-125		1		04/05/13 23:54	460-00-4	
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		04/08/13 11:55		
353.2 Nitrate + Nitrite pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.31**	mg/L	0.10	0.020	1		04/10/13 15:00		

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-02 **Lab ID: 10224382002** Collected: 04/02/13 13:22 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4								
Chemical Oxygen Demand	ND	mg/L	50.0	25.0	1		04/17/13 12:32		
SM4500CN-E Cyanide	Analytical Method: SM 4500-CN-E								
Cyanide	**12.5**	ug/L	10.0	5.0	1		04/09/13 11:46	57-12-5	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-03 **Lab ID: 10224382003** Collected: 04/02/13 14:15 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	ND	ug/L	0.10	0.044	1	04/08/13 07:19	04/09/13 16:30	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.10	0.038	1	04/08/13 07:19	04/09/13 16:30	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.10	0.029	1	04/08/13 07:19	04/09/13 16:30	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.10	0.039	1	04/08/13 07:19	04/09/13 16:30	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.10	0.029	1	04/08/13 07:19	04/09/13 16:30	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.10	0.038	1	04/08/13 07:19	04/09/13 16:30	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.10	0.028	1	04/08/13 07:19	04/09/13 16:30	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/L	0.10	0.016	1	04/08/13 07:19	04/09/13 16:30	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/L	0.10	0.020	1	04/08/13 07:19	04/09/13 16:30	11100-14-4	
Surrogates									
Tetrachloro-m-xylene (S)	65	%	39-125		1	04/08/13 07:19	04/09/13 16:30	877-09-8	
Decachlorobiphenyl (S)	76	%	30-125		1	04/08/13 07:19	04/09/13 16:30	2051-24-3	
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151								
Bentazon	ND	ug/L	0.097	0.017	1	04/08/13 08:00	04/09/13 19:54	25057-89-0	
2,4-D	ND	ug/L	0.97	0.23	1	04/08/13 08:00	04/09/13 19:54	94-75-7	
Dalapon	ND	ug/L	0.94	0.44	1	04/08/13 08:00	04/09/13 19:54	75-99-0	
2,4-DB	ND	ug/L	2.0	0.53	1	04/08/13 08:00	04/09/13 19:54	94-82-6	
Dicamba	ND	ug/L	0.097	0.031	1	04/08/13 08:00	04/09/13 19:54	1918-00-9	
Dichlorprop	ND	ug/L	0.67	0.20	1	04/08/13 08:00	04/09/13 19:54	120-36-5	
Dinoseb	ND	ug/L	0.19	0.059	1	04/08/13 08:00	04/09/13 19:54	88-85-7	
Pentachlorophenol	ND	ug/L	0.029	0.018	1	04/08/13 08:00	04/09/13 19:54	87-86-5	
Picloram	**0.20**	ug/L	0.098	0.020	1	04/08/13 08:00	04/09/13 19:54	1918-02-1	
2,4,5-T	ND	ug/L	0.20	0.043	1	04/08/13 08:00	04/09/13 19:54	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	0.20	0.051	1	04/08/13 08:00	04/09/13 19:54	93-72-1	
Surrogates									
2,4-DCAA (S)	80	%	42-142		1	04/08/13 08:00	04/09/13 19:54	19719-28-9	
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	10.0	1		04/06/13 00:43	67-64-1	
Acetonitrile	ND	ug/L	100	50.0	1		04/06/13 00:43	75-05-8	
Benzene	ND	ug/L	1.0	0.062	1		04/06/13 00:43	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.32	1		04/06/13 00:43	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		04/06/13 00:43	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		04/06/13 00:43	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		04/06/13 00:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	2.5	1		04/06/13 00:43	78-93-3	
Carbon disulfide	ND	ug/L	1.0	0.50	1		04/06/13 00:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		04/06/13 00:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		04/06/13 00:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.22	1		04/06/13 00:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/06/13 00:43	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		04/06/13 00:43	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		04/06/13 00:43	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		04/06/13 00:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		04/06/13 00:43	106-93-4	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-03 **Lab ID: 10224382003** Collected: 04/02/13 14:15 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dibromomethane	ND	ug/L	4.0	0.21	1		04/06/13 00:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		04/06/13 00:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		04/06/13 00:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		04/06/13 00:43	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	10.0	0.32	1		04/06/13 00:43	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/06/13 00:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		04/06/13 00:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		04/06/13 00:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		04/06/13 00:43	75-35-4	
cis-1,2-Dichloroethene	**0.91J**	ug/L	1.0	0.085	1		04/06/13 00:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		04/06/13 00:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		04/06/13 00:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		04/06/13 00:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		04/06/13 00:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.081	1		04/06/13 00:43	100-41-4	
2-Hexanone	ND	ug/L	5.0	2.5	1		04/06/13 00:43	591-78-6	
Iodomethane	ND	ug/L	4.0	1.1	1		04/06/13 00:43	74-88-4	
Methylene Chloride	ND	ug/L	4.0	2.0	1		04/06/13 00:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	2.5	1		04/06/13 00:43	108-10-1	
Styrene	ND	ug/L	1.0	0.060	1		04/06/13 00:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		04/06/13 00:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		04/06/13 00:43	79-34-5	
Tetrachloroethene	**0.32J**	ug/L	1.0	0.13	1		04/06/13 00:43	127-18-4	
Toluene	ND	ug/L	1.0	0.077	1		04/06/13 00:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		04/06/13 00:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		04/06/13 00:43	79-00-5	
Trichloroethene	**0.11J**	ug/L	1.0	0.083	1		04/06/13 00:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		04/06/13 00:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		04/06/13 00:43	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.44	1		04/06/13 00:43	108-05-4	
Vinyl chloride	ND	ug/L	0.40	0.16	1		04/06/13 00:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.22	1		04/06/13 00:43	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.11	1		04/06/13 00:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.10	1		04/06/13 00:43	95-47-6	
Surrogates									
1,2-Dichloroethane-d4 (S)	97	%	75-125		1		04/06/13 00:43	17060-07-0	
Toluene-d8 (S)	99	%	75-125		1		04/06/13 00:43	2037-26-5	
4-Bromofluorobenzene (S)	99	%	75-125		1		04/06/13 00:43	460-00-4	
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**8.6**	mg/L	5.0	2.3	1		04/08/13 12:01		
353.2 Nitrate + Nitrite pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.70**	mg/L	0.10	0.020	1		04/10/13 15:01		

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-03 Lab ID: **10224382003** Collected: 04/02/13 14:15 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4								
Chemical Oxygen Demand	**64.2**	mg/L	50.0	25.0	1		04/17/13 12:33		
SM4500CN-E Cyanide	Analytical Method: SM 4500-CN-E								
Cyanide	**20.0**	ug/L	10.0	5.0	1		04/09/13 11:47	57-12-5	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-04 **Lab ID: 10224382004** Collected: 04/02/13 16:10 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	ND	ug/L	0.10	0.043	1	04/08/13 07:19	04/09/13 16:46	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.10	0.037	1	04/08/13 07:19	04/09/13 16:46	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.10	0.028	1	04/08/13 07:19	04/09/13 16:46	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.10	0.038	1	04/08/13 07:19	04/09/13 16:46	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.10	0.028	1	04/08/13 07:19	04/09/13 16:46	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.10	0.037	1	04/08/13 07:19	04/09/13 16:46	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.10	0.027	1	04/08/13 07:19	04/09/13 16:46	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/L	0.10	0.016	1	04/08/13 07:19	04/09/13 16:46	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/L	0.10	0.020	1	04/08/13 07:19	04/09/13 16:46	11100-14-4	
Surrogates									
Tetrachloro-m-xylene (S)	80	%	39-125		1	04/08/13 07:19	04/09/13 16:46	877-09-8	
Decachlorobiphenyl (S)	56	%	30-125		1	04/08/13 07:19	04/09/13 16:46	2051-24-3	
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151								
Bentazon	ND	ug/L	0.096	0.016	1	04/08/13 08:00	04/09/13 20:24	25057-89-0	
2,4-D	ND	ug/L	0.96	0.23	1	04/08/13 08:00	04/09/13 20:24	94-75-7	
Dalapon	ND	ug/L	0.93	0.44	1	04/08/13 08:00	04/09/13 20:24	75-99-0	
2,4-DB	ND	ug/L	1.9	0.52	1	04/08/13 08:00	04/09/13 20:24	94-82-6	
Dicamba	ND	ug/L	0.096	0.031	1	04/08/13 08:00	04/09/13 20:24	1918-00-9	
Dichlorprop	ND	ug/L	0.67	0.19	1	04/08/13 08:00	04/09/13 20:24	120-36-5	
Dinoseb	ND	ug/L	0.19	0.058	1	04/08/13 08:00	04/09/13 20:24	88-85-7	
Pentachlorophenol	ND	ug/L	0.029	0.017	1	04/08/13 08:00	04/09/13 20:24	87-86-5	
Picloram	ND	ug/L	0.096	0.019	1	04/08/13 08:00	04/09/13 20:24	1918-02-1	
2,4,5-T	ND	ug/L	0.19	0.043	1	04/08/13 08:00	04/09/13 20:24	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	0.19	0.050	1	04/08/13 08:00	04/09/13 20:24	93-72-1	
Surrogates									
2,4-DCAA (S)	73	%	42-142		1	04/08/13 08:00	04/09/13 20:24	19719-28-9	
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	10.0	1		04/06/13 01:07	67-64-1	
Acetonitrile	ND	ug/L	100	50.0	1		04/06/13 01:07	75-05-8	
Benzene	**0.56J**	ug/L	1.0	0.062	1		04/06/13 01:07	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.32	1		04/06/13 01:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		04/06/13 01:07	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		04/06/13 01:07	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		04/06/13 01:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	2.5	1		04/06/13 01:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	0.50	1		04/06/13 01:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		04/06/13 01:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		04/06/13 01:07	108-90-7	
Chloroethane	**0.24J**	ug/L	1.0	0.22	1		04/06/13 01:07	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/06/13 01:07	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		04/06/13 01:07	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		04/06/13 01:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		04/06/13 01:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		04/06/13 01:07	106-93-4	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-04 **Lab ID: 10224382004** Collected: 04/02/13 16:10 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dibromomethane	ND	ug/L	4.0	0.21	1		04/06/13 01:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		04/06/13 01:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		04/06/13 01:07	541-73-1	
1,4-Dichlorobenzene	**2.8**	ug/L	1.0	0.064	1		04/06/13 01:07	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	10.0	0.32	1		04/06/13 01:07	110-57-6	
Dichlorodifluoromethane	**1.1**	ug/L	1.0	0.20	1		04/06/13 01:07	75-71-8	
1,1-Dichloroethane	**1.2**	ug/L	1.0	0.11	1		04/06/13 01:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		04/06/13 01:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		04/06/13 01:07	75-35-4	
cis-1,2-Dichloroethene	**3.7**	ug/L	1.0	0.085	1		04/06/13 01:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		04/06/13 01:07	156-60-5	
1,2-Dichloropropane	**0.43J**	ug/L	4.0	0.27	1		04/06/13 01:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		04/06/13 01:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		04/06/13 01:07	10061-02-6	
Ethylbenzene	**0.14J**	ug/L	1.0	0.081	1		04/06/13 01:07	100-41-4	
2-Hexanone	ND	ug/L	5.0	2.5	1		04/06/13 01:07	591-78-6	
Iodomethane	ND	ug/L	4.0	1.1	1		04/06/13 01:07	74-88-4	
Methylene Chloride	ND	ug/L	4.0	2.0	1		04/06/13 01:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	2.5	1		04/06/13 01:07	108-10-1	
Styrene	ND	ug/L	1.0	0.060	1		04/06/13 01:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		04/06/13 01:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		04/06/13 01:07	79-34-5	
Tetrachloroethene	**0.26J**	ug/L	1.0	0.13	1		04/06/13 01:07	127-18-4	
Toluene	**0.091J**	ug/L	1.0	0.077	1		04/06/13 01:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		04/06/13 01:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		04/06/13 01:07	79-00-5	
Trichloroethene	**0.33J**	ug/L	1.0	0.083	1		04/06/13 01:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		04/06/13 01:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		04/06/13 01:07	96-18-4	
Vinyl acetate	ND	ug/L	10.0	0.44	1		04/06/13 01:07	108-05-4	
Vinyl chloride	**2.4**	ug/L	0.40	0.16	1		04/06/13 01:07	75-01-4	
Xylene (Total)	**0.56J**	ug/L	3.0	0.22	1		04/06/13 01:07	1330-20-7	
m&p-Xylene	**0.44J**	ug/L	2.0	0.11	1		04/06/13 01:07	179601-23-1	
o-Xylene	**0.12J**	ug/L	1.0	0.10	1		04/06/13 01:07	95-47-6	
Surrogates									
1,2-Dichloroethane-d4 (S)	96	%	75-125		1		04/06/13 01:07	17060-07-0	
Toluene-d8 (S)	100	%	75-125		1		04/06/13 01:07	2037-26-5	
4-Bromofluorobenzene (S)	99	%	75-125		1		04/06/13 01:07	460-00-4	
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**16.2**	mg/L	5.0	2.3	1		04/08/13 12:11		P4
353.2 Nitrate + Nitrite pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.020	1		04/10/13 15:02		

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-04 **Lab ID: 10224382004** Collected: 04/02/13 16:10 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4								
Chemical Oxygen Demand	**565**	mg/L	50.0	25.0	1		04/17/13 12:34		
SM4500CN-E Cyanide	Analytical Method: SM 4500-CN-E								
Cyanide	**15.8**	ug/L	10.0	5.0	1		04/09/13 11:49	57-12-5	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-07 **Lab ID: 10224382005** Collected: 04/02/13 16:10 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	10.0	1		04/06/13 01:31	67-64-1	
Acetonitrile	ND	ug/L	100	50.0	1		04/06/13 01:31	75-05-8	
Benzene	**0.50J**	ug/L	1.0	0.062	1		04/06/13 01:31	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.32	1		04/06/13 01:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		04/06/13 01:31	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		04/06/13 01:31	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		04/06/13 01:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	2.5	1		04/06/13 01:31	78-93-3	
Carbon disulfide	ND	ug/L	1.0	0.50	1		04/06/13 01:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		04/06/13 01:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		04/06/13 01:31	108-90-7	
Chloroethane	**0.22J**	ug/L	1.0	0.22	1		04/06/13 01:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/06/13 01:31	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		04/06/13 01:31	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		04/06/13 01:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		04/06/13 01:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		04/06/13 01:31	106-93-4	
Dibromomethane	ND	ug/L	4.0	0.21	1		04/06/13 01:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		04/06/13 01:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		04/06/13 01:31	541-73-1	
1,4-Dichlorobenzene	**2.5**	ug/L	1.0	0.064	1		04/06/13 01:31	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	10.0	0.32	1		04/06/13 01:31	110-57-6	
Dichlorodifluoromethane	**1.1**	ug/L	1.0	0.20	1		04/06/13 01:31	75-71-8	
1,1-Dichloroethane	**1.1**	ug/L	1.0	0.11	1		04/06/13 01:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		04/06/13 01:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		04/06/13 01:31	75-35-4	
cis-1,2-Dichloroethene	**3.2**	ug/L	1.0	0.085	1		04/06/13 01:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		04/06/13 01:31	156-60-5	
1,2-Dichloropropane	**0.39J**	ug/L	4.0	0.27	1		04/06/13 01:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		04/06/13 01:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		04/06/13 01:31	10061-02-6	
Ethylbenzene	**0.15J**	ug/L	1.0	0.081	1		04/06/13 01:31	100-41-4	
2-Hexanone	ND	ug/L	5.0	2.5	1		04/06/13 01:31	591-78-6	
Iodomethane	ND	ug/L	4.0	1.1	1		04/06/13 01:31	74-88-4	
Methylene Chloride	ND	ug/L	4.0	2.0	1		04/06/13 01:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	2.5	1		04/06/13 01:31	108-10-1	
Styrene	ND	ug/L	1.0	0.060	1		04/06/13 01:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		04/06/13 01:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		04/06/13 01:31	79-34-5	
Tetrachloroethene	**0.21J**	ug/L	1.0	0.13	1		04/06/13 01:31	127-18-4	
Toluene	**0.081J**	ug/L	1.0	0.077	1		04/06/13 01:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		04/06/13 01:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		04/06/13 01:31	79-00-5	
Trichloroethene	**0.33J**	ug/L	1.0	0.083	1		04/06/13 01:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		04/06/13 01:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		04/06/13 01:31	96-18-4	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: BSB-GW-07 **Lab ID: 10224382005** Collected: 04/02/13 16:10 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Vinyl acetate	ND	ug/L	10.0	0.44	1		04/06/13 01:31	108-05-4	
Vinyl chloride	**2.2**	ug/L	0.40	0.16	1		04/06/13 01:31	75-01-4	
Xylene (Total)	**0.57J**	ug/L	3.0	0.22	1		04/06/13 01:31	1330-20-7	
m&p-Xylene	**0.44J**	ug/L	2.0	0.11	1		04/06/13 01:31	179601-23-1	
o-Xylene	**0.13J**	ug/L	1.0	0.10	1		04/06/13 01:31	95-47-6	
Surrogates									
1,2-Dichloroethane-d4 (S)	97	%	75-125		1		04/06/13 01:31	17060-07-0	
Toluene-d8 (S)	100	%	75-125		1		04/06/13 01:31	2037-26-5	
4-Bromofluorobenzene (S)	98	%	75-125		1		04/06/13 01:31	460-00-4	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: TRIP BLANK **Lab ID: 10224382006** Collected: 04/02/13 00:00 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	10.0	1		04/05/13 23:06	67-64-1	
Acetonitrile	ND	ug/L	100	50.0	1		04/05/13 23:06	75-05-8	
Benzene	ND	ug/L	1.0	0.062	1		04/05/13 23:06	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.32	1		04/05/13 23:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		04/05/13 23:06	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		04/05/13 23:06	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		04/05/13 23:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	2.5	1		04/05/13 23:06	78-93-3	
Carbon disulfide	ND	ug/L	1.0	0.50	1		04/05/13 23:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		04/05/13 23:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		04/05/13 23:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.22	1		04/05/13 23:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/05/13 23:06	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		04/05/13 23:06	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		04/05/13 23:06	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		04/05/13 23:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		04/05/13 23:06	106-93-4	
Dibromomethane	ND	ug/L	4.0	0.21	1		04/05/13 23:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		04/05/13 23:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		04/05/13 23:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		04/05/13 23:06	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	10.0	0.32	1		04/05/13 23:06	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		04/05/13 23:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		04/05/13 23:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		04/05/13 23:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		04/05/13 23:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		04/05/13 23:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		04/05/13 23:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		04/05/13 23:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		04/05/13 23:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		04/05/13 23:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.081	1		04/05/13 23:06	100-41-4	
2-Hexanone	ND	ug/L	5.0	2.5	1		04/05/13 23:06	591-78-6	
Iodomethane	ND	ug/L	4.0	1.1	1		04/05/13 23:06	74-88-4	
Methylene Chloride	ND	ug/L	4.0	2.0	1		04/05/13 23:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	2.5	1		04/05/13 23:06	108-10-1	
Styrene	ND	ug/L	1.0	0.060	1		04/05/13 23:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		04/05/13 23:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		04/05/13 23:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		04/05/13 23:06	127-18-4	
Toluene	ND	ug/L	1.0	0.077	1		04/05/13 23:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		04/05/13 23:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		04/05/13 23:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.083	1		04/05/13 23:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		04/05/13 23:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		04/05/13 23:06	96-18-4	

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10224382

Sample: TRIP BLANK **Lab ID: 10224382006** Collected: 04/02/13 00:00 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Vinyl acetate	ND	ug/L	10.0	0.44	1		04/05/13 23:06	108-05-4	
Vinyl chloride	ND	ug/L	0.40	0.16	1		04/05/13 23:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.22	1		04/05/13 23:06	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.11	1		04/05/13 23:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.10	1		04/05/13 23:06	95-47-6	
Surrogates									
1,2-Dichloroethane-d4 (S)	98	%	75-125		1		04/05/13 23:06	17060-07-0	
Toluene-d8 (S)	99	%	75-125		1		04/05/13 23:06	2037-26-5	
4-Bromofluorobenzene (S)	99	%	75-125		1		04/05/13 23:06	460-00-4	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: MERP/8228
QC Batch Method: EPA 245.1
Analysis Method: EPA 245.1
Analysis Description: 245.1 Mercury - Dissolved
Associated Lab Samples: 10224382001

METHOD BLANK: 1405315
Matrix: Water
Associated Lab Samples: 10224382001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	mg/L	ND	0.00020	04/09/13 12:16	

LABORATORY CONTROL SAMPLE: 1405316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	mg/L	.005	0.0051	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1405317 1405318

Parameter	Units	10224502001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	mg/L	ND	.005	.005	0.0050	0.0046	101	93	85-115	8	20	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: MPRP/38392
QC Batch Method: EPA 200.8
Associated Lab Samples: 10224382001
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET Dissolved

METHOD BLANK: 1404913
Matrix: Water
Associated Lab Samples: 10224382001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Arsenic, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Barium, Dissolved	mg/L	ND	0.00030	04/08/13 11:18	
Beryllium, Dissolved	mg/L	ND	0.00020	04/08/13 11:18	
Cadmium, Dissolved	mg/L	ND	0.000080	04/08/13 11:18	
Chromium, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Cobalt, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Copper, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Iron, Dissolved	mg/L	ND	0.050	04/08/13 11:18	
Lead, Dissolved	mg/L	ND	0.00010	04/08/13 11:18	
Nickel, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Selenium, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Silver, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Thallium, Dissolved	mg/L	0.000027J	0.00010	04/08/13 11:18	
Vanadium, Dissolved	mg/L	ND	0.00010	04/08/13 11:18	
Zinc, Dissolved	mg/L	ND	0.0050	04/08/13 11:18	

LABORATORY CONTROL SAMPLE: 1404914

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	.08	0.079	98	85-115	
Arsenic, Dissolved	mg/L	.08	0.078	98	85-115	
Barium, Dissolved	mg/L	.08	0.080	100	85-115	
Beryllium, Dissolved	mg/L	.08	0.080	99	85-115	
Cadmium, Dissolved	mg/L	.08	0.080	101	85-115	
Chromium, Dissolved	mg/L	.08	0.080	100	85-115	
Cobalt, Dissolved	mg/L	.08	0.080	99	85-115	
Copper, Dissolved	mg/L	.08	0.083	103	85-115	
Iron, Dissolved	mg/L	1	0.99	99	85-115	
Lead, Dissolved	mg/L	.08	0.079	99	85-115	
Nickel, Dissolved	mg/L	.08	0.081	101	85-115	
Selenium, Dissolved	mg/L	.08	0.079	98	85-115	
Silver, Dissolved	mg/L	.08	0.073	91	85-115	
Thallium, Dissolved	mg/L	.08	0.077	97	85-115	
Vanadium, Dissolved	mg/L	.08	0.080	100	85-115	
Zinc, Dissolved	mg/L	.08	0.078	98	85-115	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1404915 1404916

Parameter	Units	10224382001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony, Dissolved	mg/L	0.00013J	.08	.08	0.079	0.079	99	99	70-130	.1	20	
Arsenic, Dissolved	mg/L	0.0011	.08	.08	0.080	0.080	99	98	70-130	.4	20	
Barium, Dissolved	mg/L	0.13	.08	.08	0.21	0.21	99	100	70-130	.5	20	
Beryllium, Dissolved	mg/L	ND	.08	.08	0.083	0.080	104	100	70-130	3	20	
Cadmium, Dissolved	mg/L	ND	.08	.08	0.078	0.082	97	103	70-130	6	20	
Chromium, Dissolved	mg/L	0.0016	.08	.08	0.079	0.081	97	100	70-130	3	20	
Cobalt, Dissolved	mg/L	0.00079	.08	.08	0.078	0.076	96	94	70-130	2	20	
Copper, Dissolved	mg/L	0.0038	.08	.08	0.082	0.082	98	98	70-130	.06	20	
Iron, Dissolved	mg/L	ND	1	1	0.99	1.0	99	102	70-130	3	20	
Lead, Dissolved	mg/L	0.000063J	.08	.08	0.079	0.079	98	99	70-130	.8	20	
Nickel, Dissolved	mg/L	0.00027J	.08	.08	0.080	0.078	99	97	70-130	2	20	
Selenium, Dissolved	mg/L	0.00095	.08	.08	0.079	0.076	97	94	70-130	3	20	
Silver, Dissolved	mg/L	0.000058J	.08	.08	0.063	0.070	79	88	70-130	11	20	
Thallium, Dissolved	mg/L	ND	.08	.08	0.077	0.081	96	101	70-130	5	20	
Vanadium, Dissolved	mg/L	0.0067	.08	.08	0.087	0.087	100	101	70-130	.6	20	
Zinc, Dissolved	mg/L	0.0015J	.08	.08	0.080	0.080	98	98	70-130	.3	20	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: MSV/23295 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004, 10224382005, 10224382006

METHOD BLANK: 1404918 Matrix: Water
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004, 10224382005, 10224382006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	04/05/13 21:28	
1,1,1-Trichloroethane	ug/L	ND	1.0	04/05/13 21:28	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/05/13 21:28	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/05/13 21:28	
1,1-Dichloroethane	ug/L	ND	1.0	04/05/13 21:28	
1,1-Dichloroethene	ug/L	ND	1.0	04/05/13 21:28	
1,2,3-Trichloropropane	ug/L	ND	4.0	04/05/13 21:28	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	04/05/13 21:28	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	04/05/13 21:28	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/05/13 21:28	
1,2-Dichloroethane	ug/L	ND	1.0	04/05/13 21:28	
1,2-Dichloropropane	ug/L	ND	4.0	04/05/13 21:28	
1,3-Dichlorobenzene	ug/L	ND	1.0	04/05/13 21:28	
1,4-Dichlorobenzene	ug/L	ND	1.0	04/05/13 21:28	
2-Butanone (MEK)	ug/L	ND	5.0	04/05/13 21:28	
2-Hexanone	ug/L	ND	5.0	04/05/13 21:28	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	04/05/13 21:28	
Acetone	ug/L	ND	20.0	04/05/13 21:28	
Acetonitrile	ug/L	ND	100	04/05/13 21:28	
Benzene	ug/L	ND	1.0	04/05/13 21:28	
Bromochloromethane	ug/L	ND	1.0	04/05/13 21:28	
Bromodichloromethane	ug/L	ND	1.0	04/05/13 21:28	
Bromoform	ug/L	ND	4.0	04/05/13 21:28	
Bromomethane	ug/L	ND	4.0	04/05/13 21:28	
Carbon disulfide	ug/L	ND	1.0	04/05/13 21:28	
Carbon tetrachloride	ug/L	ND	1.0	04/05/13 21:28	
Chlorobenzene	ug/L	ND	1.0	04/05/13 21:28	
Chloroethane	ug/L	ND	1.0	04/05/13 21:28	
Chloroform	ug/L	ND	1.0	04/05/13 21:28	
Chloromethane	ug/L	ND	4.0	04/05/13 21:28	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/05/13 21:28	
cis-1,3-Dichloropropene	ug/L	ND	4.0	04/05/13 21:28	
Dibromochloromethane	ug/L	ND	1.0	04/05/13 21:28	
Dibromomethane	ug/L	ND	4.0	04/05/13 21:28	
Dichlorodifluoromethane	ug/L	ND	1.0	04/05/13 21:28	
Ethylbenzene	ug/L	ND	1.0	04/05/13 21:28	
Iodomethane	ug/L	ND	4.0	04/05/13 21:28	
m&p-Xylene	ug/L	ND	2.0	04/05/13 21:28	
Methylene Chloride	ug/L	ND	4.0	04/05/13 21:28	
o-Xylene	ug/L	ND	1.0	04/05/13 21:28	
Styrene	ug/L	ND	1.0	04/05/13 21:28	
Tetrachloroethene	ug/L	ND	1.0	04/05/13 21:28	
Toluene	ug/L	ND	1.0	04/05/13 21:28	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

METHOD BLANK: 1404918 Matrix: Water

Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004, 10224382005, 10224382006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/05/13 21:28	
trans-1,3-Dichloropropene	ug/L	ND	4.0	04/05/13 21:28	
trans-1,4-Dichloro-2-butene	ug/L	ND	10.0	04/05/13 21:28	
Trichloroethene	ug/L	ND	1.0	04/05/13 21:28	
Trichlorofluoromethane	ug/L	ND	1.0	04/05/13 21:28	
Vinyl acetate	ug/L	ND	10.0	04/05/13 21:28	
Vinyl chloride	ug/L	ND	0.40	04/05/13 21:28	
Xylene (Total)	ug/L	ND	3.0	04/05/13 21:28	
1,2-Dichloroethane-d4 (S)	%	98	75-125	04/05/13 21:28	
4-Bromofluorobenzene (S)	%	101	75-125	04/05/13 21:28	
Toluene-d8 (S)	%	101	75-125	04/05/13 21:28	

LABORATORY CONTROL SAMPLE: 1404919

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.4	102	75-125	
1,1,1-Trichloroethane	ug/L	20	19.8	99	75-126	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	75-125	
1,1,2-Trichloroethane	ug/L	20	20.4	102	75-125	
1,1-Dichloroethane	ug/L	20	19.9	99	75-125	
1,1-Dichloroethene	ug/L	20	19.9	99	71-126	
1,2,3-Trichloropropane	ug/L	20	19.9	100	75-125	
1,2-Dibromo-3-chloropropane	ug/L	50	51.2	102	73-125	
1,2-Dibromoethane (EDB)	ug/L	20	20.4	102	75-125	
1,2-Dichlorobenzene	ug/L	20	20.3	101	75-125	
1,2-Dichloroethane	ug/L	20	19.4	97	74-125	
1,2-Dichloropropane	ug/L	20	20.2	101	75-125	
1,3-Dichlorobenzene	ug/L	20	20.0	100	75-125	
1,4-Dichlorobenzene	ug/L	20	20.0	100	75-125	
2-Butanone (MEK)	ug/L	100	94.1	94	68-126	
2-Hexanone	ug/L	100	98.3	98	70-125	
4-Methyl-2-pentanone (MIBK)	ug/L	100	99.3	99	72-125	
Acetone	ug/L	100	103	103	69-132	
Acetonitrile	ug/L	200	200	100	62-127	
Benzene	ug/L	20	19.4	97	75-125	
Bromochloromethane	ug/L	20	21.0	105	75-125	
Bromodichloromethane	ug/L	20	20.5	103	75-125	
Bromoform	ug/L	20	20.3	101	75-126	
Bromomethane	ug/L	20	21.3	106	30-150	
Carbon disulfide	ug/L	20	19.1	95	66-126	
Carbon tetrachloride	ug/L	20	19.4	97	74-127	
Chlorobenzene	ug/L	20	20.2	101	75-125	
Chloroethane	ug/L	20	21.7	109	68-132	
Chloroform	ug/L	20	19.9	99	75-125	
Chloromethane	ug/L	20	20.2	101	61-129	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

LABORATORY CONTROL SAMPLE: 1404919

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	20	20.3	102	75-125	
cis-1,3-Dichloropropene	ug/L	20	20.5	102	75-125	
Dibromochloromethane	ug/L	20	21.2	106	75-125	
Dibromomethane	ug/L	20	20.5	103	75-125	
Dichlorodifluoromethane	ug/L	20	20.1	101	49-137	
Ethylbenzene	ug/L	20	19.6	98	75-125	
Iodomethane	ug/L	20	19.4	97	30-141	
m&p-Xylene	ug/L	40	40.4	101	75-125	
Methylene Chloride	ug/L	20	19.9	100	75-125	
o-Xylene	ug/L	20	20.5	102	75-125	
Styrene	ug/L	20	20.6	103	75-125	
Tetrachloroethene	ug/L	20	19.9	99	75-125	
Toluene	ug/L	20	20.0	100	75-125	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	74-125	
trans-1,3-Dichloropropene	ug/L	20	20.6	103	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	48.7	97	70-127	
Trichloroethene	ug/L	20	20.3	101	75-125	
Trichlorofluoromethane	ug/L	20	20.0	100	69-129	
Vinyl acetate	ug/L	20	19.2	96	70-125	
Vinyl chloride	ug/L	20	19.9	99	70-128	
Xylene (Total)	ug/L	60	60.9	102	75-125	
1,2-Dichloroethane-d4 (S)	%			93	75-125	
4-Bromofluorobenzene (S)	%			99	75-125	
Toluene-d8 (S)	%			100	75-125	

MATRIX SPIKE SAMPLE: 1404920

Parameter	Units	10224382001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	19.8	99	75-125	
1,1,1-Trichloroethane	ug/L	ND	20	20.8	104	75-136	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	17.9	90	66-131	
1,1,2-Trichloroethane	ug/L	ND	20	19.2	96	75-125	
1,1-Dichloroethane	ug/L	ND	20	19.8	99	75-131	
1,1-Dichloroethene	ug/L	ND	20	21.6	108	75-138	
1,2,3-Trichloropropane	ug/L	ND	20	18.1	91	71-126	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	45.6	91	69-127	
1,2-Dibromoethane (EDB)	ug/L	ND	20	18.8	94	75-125	
1,2-Dichlorobenzene	ug/L	ND	20	18.9	95	75-125	
1,2-Dichloroethane	ug/L	ND	20	18.3	91	74-128	
1,2-Dichloropropane	ug/L	ND	20	19.1	95	75-125	
1,3-Dichlorobenzene	ug/L	ND	20	18.9	95	75-125	
1,4-Dichlorobenzene	ug/L	ND	20	18.9	95	75-125	
2-Butanone (MEK)	ug/L	ND	100	87.0	87	64-125	
2-Hexanone	ug/L	ND	100	89.7	90	67-125	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	90.9	91	69-125	
Acetone	ug/L	ND	100	93.8	94	57-135	
Acetonitrile	ug/L	ND	200	180	90	62-125	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

MATRIX SPIKE SAMPLE: 1404920

Parameter	Units	10224382001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	19.4	97	70-135	
Bromochloromethane	ug/L	ND	20	20.0	100	75-125	
Bromodichloromethane	ug/L	ND	20	19.4	97	75-125	
Bromoform	ug/L	ND	20	19.2	96	68-133	
Bromomethane	ug/L	ND	20	23.8	119	56-150	
Carbon disulfide	ug/L	ND	20	21.0	105	66-135	
Carbon tetrachloride	ug/L	ND	20	21.0	105	75-137	
Chlorobenzene	ug/L	ND	20	19.5	98	75-125	
Chloroethane	ug/L	ND	20	23.6	118	64-150	
Chloroform	ug/L	ND	20	19.7	99	75-127	
Chloromethane	ug/L	ND	20	21.9	110	65-140	
cis-1,2-Dichloroethene	ug/L	ND	20	19.9	99	75-129	
cis-1,3-Dichloropropene	ug/L	ND	20	18.8	94	75-125	
Dibromochloromethane	ug/L	ND	20	19.9	99	75-125	
Dibromomethane	ug/L	ND	20	18.8	94	75-125	
Dichlorodifluoromethane	ug/L	ND	20	26.9	135	70-150	
Ethylbenzene	ug/L	ND	20	19.6	98	75-125	
Iodomethane	ug/L	ND	20	19.5	98	49-150	
m&p-Xylene	ug/L	0.25J	40	41.1	102	75-125	
Methylene Chloride	ug/L	ND	20	19.2	96	73-125	
o-Xylene	ug/L	ND	20	20.5	103	75-125	
Styrene	ug/L	ND	20	19.3	97	52-137	
Tetrachloroethene	ug/L	ND	20	20.7	104	75-130	
Toluene	ug/L	ND	20	19.8	99	75-125	
trans-1,2-Dichloroethene	ug/L	ND	20	20.8	104	75-135	
trans-1,3-Dichloropropene	ug/L	ND	20	19.3	97	75-125	
trans-1,4-Dichloro-2-butene	ug/L	ND	50	43.7	87	62-130	
Trichloroethene	ug/L	ND	20	20.2	101	75-129	
Trichlorofluoromethane	ug/L	ND	20	24.5	123	75-150	
Vinyl acetate	ug/L	ND	20	16.6	83	57-139	
Vinyl chloride	ug/L	ND	20	22.4	112	75-147	
Xylene (Total)	ug/L	0.25J	60	61.6	102	75-125	
1,2-Dichloroethane-d4 (S)	%				94	75-125	
4-Bromofluorobenzene (S)	%				96	75-125	
Toluene-d8 (S)	%				100	75-125	

SAMPLE DUPLICATE: 1404921

Parameter	Units	10224382002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

SAMPLE DUPLICATE: 1404921

Parameter	Units	10224382002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	ND	ND		30	
Acetonitrile	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon disulfide	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	0.53J	0.54J		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Iodomethane	ug/L	ND	ND		30	
m&p-Xylene	ug/L	0.18J	0.19J		30	
Methylene Chloride	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
trans-1,4-Dichloro-2-butene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	0.22J	ND		30	
1,2-Dichloroethane-d4 (S)	%	97	96	1		
4-Bromofluorobenzene (S)	%	98	99	.9		
Toluene-d8 (S)	%	99	100	.4		

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: OEXT/21311
QC Batch Method: EPA 3510
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

METHOD BLANK: 1405371
Matrix: Water
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1221 (Aroclor 1221)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1232 (Aroclor 1232)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1242 (Aroclor 1242)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1248 (Aroclor 1248)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1254 (Aroclor 1254)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1260 (Aroclor 1260)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1262 (Aroclor 1262)	ug/L	ND	0.10	04/09/13 13:24	
PCB-1268 (Aroclor 1268)	ug/L	ND	0.10	04/09/13 13:24	
Decachlorobiphenyl (S)	%	82	30-125	04/09/13 13:24	
Tetrachloro-m-xylene (S)	%	62	39-125	04/09/13 13:24	

LABORATORY CONTROL SAMPLE & LCSD: 1405372 1405373

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2	1.6	1.5	80	73	58-125	10	20	
PCB-1260 (Aroclor 1260)	ug/L	2	1.5	1.4	76	71	53-125	7	20	
Decachlorobiphenyl (S)	%				84	76	30-125			
Tetrachloro-m-xylene (S)	%				65	56	39-125			

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: OEXT/12219 Analysis Method: EPA 8151
QC Batch Method: EPA 8151 Analysis Description: 8151A GCS Herbicides
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

METHOD BLANK: 600989 Matrix: Water
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-T	ug/L	ND	0.19	04/09/13 12:48	
2,4,5-TP (Silvex)	ug/L	ND	0.19	04/09/13 12:48	
2,4-D	ug/L	ND	0.94	04/09/13 12:48	
2,4-DB	ug/L	ND	1.9	04/09/13 12:48	
Bentazon	ug/L	ND	0.094	04/09/13 12:48	
Dalapon	ug/L	ND	0.91	04/09/13 12:48	
Dicamba	ug/L	ND	0.094	04/09/13 12:48	
Dichlorprop	ug/L	ND	0.65	04/09/13 12:48	
Dinoseb	ug/L	ND	0.19	04/09/13 12:48	
Pentachlorophenol	ug/L	ND	0.028	04/09/13 12:48	
Picloram	ug/L	ND	0.094	04/09/13 12:48	
2,4-DCAA (S)	%	118	42-142	04/09/13 12:48	

LABORATORY CONTROL SAMPLE: 600990

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-T	ug/L	1.2	1.1	89	28-161	
2,4,5-TP (Silvex)	ug/L	1.2	1.1	94	27-170	
2,4-D	ug/L	6	4.9	82	23-163	
2,4-DB	ug/L	12	11.6	97	19-178	
Bentazon	ug/L	.6	0.60	99	14-196	
Dalapon	ug/L	6	5.1	86	11-146	
Dicamba	ug/L	.6	0.51	85	31-141	
Dichlorprop	ug/L	4.2	3.8	91	67-114	
Dinoseb	ug/L	1.2	0.94	78	24-151	
Pentachlorophenol	ug/L	.18	0.15	82	29-143	
Picloram	ug/L	.6	0.49	81	10-144	
2,4-DCAA (S)	%			88	42-142	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 601016 601017

Parameter	Units	60141644004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2,4,5-T	ug/L	ND	2.4	2.4	2.1	2.1	87	86	36-169	.5	40	
2,4,5-TP (Silvex)	ug/L	ND	2.4	2.4	2.3	2.2	95	92	20-176	3	40	
2,4-D	ug/L	ND	12	12	10.1	9.3	84	77	17-167	8	40	
2,4-DB	ug/L	ND	24	24	23.5	25.6	98	107	10-180	8	40	
Bentazon	ug/L	ND	1.2	1.2	1.2	1.2	101	98	10-231	3	40	
Dalapon	ug/L	ND	12	12	11.0	10.4	92	87	10-157	6	40	
Dicamba	ug/L	ND	1.2	1.2	1.7	1.8	143	150	13-148	5	40	M1

QUALITY CONTROL DATA

Project:	OLD LANDFILL
Pace Project No.:	10224382

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 601016 601017

Parameter	Units	60141644004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dichlorprop	ug/L	ND	8.4	8.4	7.6	7.3	91	87	67-174	4	40	
Dinoseb	ug/L	ND	2.4	2.4	1.6	1.9	68	80	10-163	17	40	
Pentachlorophenol	ug/L	0.054	.36	.36	0.34	0.32	80	74	10-162	7	40	
Picloram	ug/L	ND	1.2	1.2	1.1	1.1	89	91	10-164	2	40	
2,4-DCAA (S)	%						93	89	42-142			

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: WET/14624
Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000)
Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

METHOD BLANK: 770686
Matrix: Water
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	ND	5.0	04/08/13 11:18	

LABORATORY CONTROL SAMPLE: 770687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	52.8	50.8	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 770688 770689

Parameter	Units	10224382001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	52.8	52.8	50.8	49.2	95	92	80-120	3	20	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: WETA/14550
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

METHOD BLANK: 1405967
Matrix: Water
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	04/10/13 14:47	

LABORATORY CONTROL SAMPLE: 1405968

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1405969 1405970

Parameter	Units	10224502001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	1.1	2.5	2.5	3.6	3.6	102	101	80-120	.8	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1406347 1406348

Parameter	Units	10224759003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.5	2.4	2.5	97	99	80-120	2	20	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: WETA/14598
Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4
Analysis Description: 410.4 COD
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

METHOD BLANK: 1409799
Matrix: Water
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	ND	50.0	04/17/13 12:25	

LABORATORY CONTROL SAMPLE: 1409800

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	301	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409801 1409802

Parameter	Units	10224382001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	250	250	260	258	99	98	90-110	.7	20	

QUALITY CONTROL DATA

Project: OLD LANDFILL
Pace Project No.: 10224382

QC Batch: WETA/14541
Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E
Analysis Description: SM4500CN-E Cyanide
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

METHOD BLANK: 1405409
Matrix: Water
Associated Lab Samples: 10224382001, 10224382002, 10224382003, 10224382004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	ND	10.0	04/09/13 11:41	

LABORATORY CONTROL SAMPLE: 1405410

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	250	254	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1405411 1405412

Parameter	Units	10224382001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	ug/L	8.7J	250	250	286	274	111	106	80-120	4	30	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1405413 1405414

Parameter	Units	1218766002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	ug/L	16.5	250	250	294	265	111	100	80-120	10	30	

QUALIFIERS

Project: OLD LANDFILL
Pace Project No.: 10224382

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay
PASI-M	Pace Analytical Services - Minneapolis
PASI-O	Pace Analytical Services - Ormond Beach

BATCH QUALIFIERS

Batch: GCSV/11091

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P4	Sample field preservation does not meet EPA or method recommendations for this analysis.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	OLD LANDFILL
Pace Project No.:	10224382

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10224382001	**BSB-GW-01**	EPA 3510	OEXT/21311	EPA 8082	GCSV/11091
10224382002	**BSB-GW-02**	EPA 3510	OEXT/21311	EPA 8082	GCSV/11091
10224382003	**BSB-GW-03**	EPA 3510	OEXT/21311	EPA 8082	GCSV/11091
10224382004	**BSB-GW-04**	EPA 3510	OEXT/21311	EPA 8082	GCSV/11091
10224382001	**BSB-GW-01**	EPA 8151	OEXT/12219	EPA 8151	GCSV/8282
10224382002	**BSB-GW-02**	EPA 8151	OEXT/12219	EPA 8151	GCSV/8282
10224382003	**BSB-GW-03**	EPA 8151	OEXT/12219	EPA 8151	GCSV/8282
10224382004	**BSB-GW-04**	EPA 8151	OEXT/12219	EPA 8151	GCSV/8282
10224382001	**BSB-GW-01**	EPA 200.8	MPRP/38392	EPA 200.8	ICPM/15738
10224382001	**BSB-GW-01**	EPA 245.1	MERP/8228	EPA 245.1	MERC/9322
10224382001	**BSB-GW-01**	EPA 8260	MSV/23295		
10224382002	**BSB-GW-02**	EPA 8260	MSV/23295		
10224382003	**BSB-GW-03**	EPA 8260	MSV/23295		
10224382004	**BSB-GW-04**	EPA 8260	MSV/23295		
10224382005	**BSB-GW-07**	EPA 8260	MSV/23295		
10224382006	**TRIP BLANK**	EPA 8260	MSV/23295		
10224382001	**BSB-GW-01**	SM 4500-S F (2000)	WET/14624		
10224382002	**BSB-GW-02**	SM 4500-S F (2000)	WET/14624		
10224382003	**BSB-GW-03**	SM 4500-S F (2000)	WET/14624		
10224382004	**BSB-GW-04**	SM 4500-S F (2000)	WET/14624		
10224382001	**BSB-GW-01**	EPA 353.2	WETA/14550		
10224382002	**BSB-GW-02**	EPA 353.2	WETA/14550		
10224382003	**BSB-GW-03**	EPA 353.2	WETA/14550		
10224382004	**BSB-GW-04**	EPA 353.2	WETA/14550		
10224382001	**BSB-GW-01**	EPA 410.4	WETA/14598		
10224382002	**BSB-GW-02**	EPA 410.4	WETA/14598		
10224382003	**BSB-GW-03**	EPA 410.4	WETA/14598		
10224382004	**BSB-GW-04**	EPA 410.4	WETA/14598		
10224382001	**BSB-GW-01**	SM 4500-CN-E	WETA/14541		
10224382002	**BSB-GW-02**	SM 4500-CN-E	WETA/14541		
10224382003	**BSB-GW-03**	SM 4500-CN-E	WETA/14541		
10224382004	**BSB-GW-04**	SM 4500-CN-E	WETA/14541		

Pace Analytical™

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 22, 2013

Julie Thieschafer
PASI Minnesota
1700 Elm Street
Suite 200
Minneapolis, MN 55414

RE: Project 20152575
Project ID: 10224382 / BPAR-PIONEER-MT

Dear Julie Thieschafer:

Enclosed are the analytical results for sample(s) received by the laboratory on April 05, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerly,

Regina Ste. Marie

Regina Ste. Marie
regina.ste.marie@pacelabs.com

Pace Analytical™

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152575

Client: PASI Minnesota

Project ID: 10224382 / BPAR-PIONEER-MT

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylviania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

NELAP ACCREDITED TNI LABORATORY

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152575

Client: PASI Minnesota

Project ID: 10224382 / BPAR-PIONEER-MT

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
BSB-GW-01	201079478	Water	02-Apr-13 10:25	05-Apr-13 10:10
BSB-GW-02	201079479	Water	02-Apr-13 13:22	05-Apr-13 10:10
BSB-GW-03	201079480	Water	02-Apr-13 14:15	05-Apr-13 10:10
BSB-GW-04	201079481	Water	02-Apr-13 16:10	05-Apr-13 10:10

Narrative detail for GC/MS semi-volatiles analyses:

The LCS yielded a low recovery for 1-methylnaphthalene. Associated samples were therefore re-extracted. Recovery was within limits for the re-analysis batch, however the extractions were performed outside the holding time limit..

The re-analysis of sample 201079480 yielded poor acid surrogate recoveries; base/neutral surrogate recoveries were within limits however.

Project Narrative

Project: 20152575

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times (Qualified):

These holding times were exceeded due to sample receipt or re-extraction after the holding time had expired.

Sample 201079478 analysis 352082702 8270 Water Dual pH SVOAs
Sample 201079479 analysis 352082702 8270 Water Dual pH SVOAs
Sample 201079480 analysis 352082702 8270 Water Dual pH SVOAs
Sample 201079481 analysis 352082702 8270 Water Dual pH SVOAs

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

LCS recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

Surrogate recoveries outside of QC limits are qualified in the surrogate results section.

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: BSB-GW-01
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079478
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206048
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND	N	11.5		11-Apr-13 14:55 JAM
208-96-8	Acenaphthylene	1	ND	N	11.5		11-Apr-13 14:55 JAM
120-12-7	Anthracene	1	ND	N	11.5		11-Apr-13 14:55 JAM
92-87-5	Benzidine	1	ND	N	34.5		11-Apr-13 14:55 JAM
56-55-3	Benzo(a)anthracene	1	ND	N	11.5		11-Apr-13 14:55 JAM
205-99-2	Benzo(b)fluoranthene	1	ND	N	11.5		11-Apr-13 14:55 JAM
207-08-9	Benzo(k)fluoranthene	1	ND	N	11.5		11-Apr-13 14:55 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND	N	11.5		11-Apr-13 14:55 JAM
50-32-8	Benzo(a)pyrene	1	ND	N	11.5		11-Apr-13 14:55 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND	N	11.5		11-Apr-13 14:55 JAM
85-68-7	Butylbenzylphthalate	1	ND	N	11.5		11-Apr-13 14:55 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND	N	11.5		11-Apr-13 14:55 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND	N	11.5		11-Apr-13 14:55 JAM
91-58-7	2-Chloronaphthalene	1	ND	N	11.5		11-Apr-13 14:55 JAM
95-57-8	2-Chlorophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
106-48-9	4-Chlorophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND	N	11.5		11-Apr-13 14:55 JAM
218-01-9	Chrysene	1	ND	N	11.5		11-Apr-13 14:55 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND	N	11.5		11-Apr-13 14:55 JAM
95-50-1	1,2-Dichlorobenzene	1	ND	N	11.5		11-Apr-13 14:55 JAM
541-73-1	1,3-Dichlorobenzene	1	ND	N	11.5		11-Apr-13 14:55 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND	N	23.0		11-Apr-13 14:55 JAM
120-83-2	2,4-Dichlorophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
84-66-2	Diethylphthalate	1	ND	N	11.5		11-Apr-13 14:55 JAM
105-67-9	2,4-Dimethylphenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
131-11-3	Dimethylphthalate	1	ND	N	11.5		11-Apr-13 14:55 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
51-28-5	2,4-Dinitrophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
121-14-2	2,4-Dinitrotoluene	1	ND	N	11.5		11-Apr-13 14:55 JAM
606-20-2	2,6-Dinitrotoluene	1	ND	N	11.5		11-Apr-13 14:55 JAM
117-84-0	Di-n-octylphthalate	1	ND	N	11.5		11-Apr-13 14:55 JAM
122-66-7	1,2-Diphenylhydrazine	1	ND	N	11.5		11-Apr-13 14:55 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND	N	11.5		11-Apr-13 14:55 JAM

Protocol 4/22/2013 15:59:20

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-01
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079478
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206048
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
206-44-0	Fluoranthene	1	ND	N	11.5		11-Apr-13 14:55 JAM
86-73-7	Fluorene	1	ND	N	11.5		11-Apr-13 14:55 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND	N	11.5		11-Apr-13 14:55 JAM
118-74-1	Hexachlorobenzene	1	ND	N	11.5		11-Apr-13 14:55 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND	N	11.5		11-Apr-13 14:55 JAM
67-72-1	Hexachloroethane	1	ND	N	11.5		11-Apr-13 14:55 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND	N	11.5		11-Apr-13 14:55 JAM
78-59-1	Isophorone	1	ND	N	11.5		11-Apr-13 14:55 JAM
90-12-0	1-Methylnaphthalene	1	ND	N	11.5		11-Apr-13 14:55 JAM
91-57-6	2-Methylnaphthalene	1	ND	N	11.5		11-Apr-13 14:55 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND	N	11.5		11-Apr-13 14:55 JAM
	3&4-Methylphenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
91-20-3	Naphthalene	1	ND	N	11.5		11-Apr-13 14:55 JAM
98-95-3	Nitrobenzene	1	ND	N	11.5		11-Apr-13 14:55 JAM
88-75-5	2-Nitrophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
100-02-7	4-Nitrophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
62-75-9	N-Nitrosodimethylamine	1	ND	N	11.5		11-Apr-13 14:55 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND	N	11.5		11-Apr-13 14:55 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND	N	11.5		11-Apr-13 14:55 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND	N	11.5		11-Apr-13 14:55 JAM
87-86-5	Pentachlorophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
85-01-8	Phenanthrene	1	ND	N	11.5		11-Apr-13 14:55 JAM
108-95-2	Phenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
129-00-0	Pyrene	1	ND	N	11.5		11-Apr-13 14:55 JAM
110-86-1	Pyridine	1	ND	N	11.5		11-Apr-13 14:55 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND	N	11.5		11-Apr-13 14:55 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND	N	11.5		11-Apr-13 14:55 JAM

62 compound(s) reported

Protocol 4/22/2013 15:59:20

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: BSB-GW-01
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079478
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206023
Method: EPA 8081
8081 Pests Water
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis	
309-00-2	Aldrin	1	ND		0.0500		10-Apr-13 18:21	SLF
319-84-6	alpha-BHC	1	ND		0.0500		10-Apr-13 18:21	SLF
319-85-7	beta-BHC	1	ND		0.0500		10-Apr-13 18:21	SLF
319-86-8	delta-BHC	1	ND		0.0500		10-Apr-13 18:21	SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500		10-Apr-13 18:21	SLF
5103-71-9	alpha-Chlordane	1	ND		0.0500		10-Apr-13 18:21	SLF
5103-74-2	gamma-Chlordane	1	ND		0.0500		10-Apr-13 18:21	SLF
510-15-6	Chlorobenzilate	1	ND		1.00		10-Apr-13 18:21	SLF
72-54-8	4,4'-DDD	1	ND		0.100		10-Apr-13 18:21	SLF
72-55-9	4,4'-DDE	1	ND		0.100		10-Apr-13 18:21	SLF
50-29-3	4,4'-DDT	1	ND		0.100		10-Apr-13 18:21	SLF
2303-16-4	Diallate	1	ND		1.00		10-Apr-13 18:21	SLF
60-57-1	Dieldrin	1	ND		0.100		10-Apr-13 18:21	SLF
959-98-8	Endosulfan I	1	ND		0.0500		10-Apr-13 18:21	SLF
33213-65-9	Endosulfan II	1	ND		0.100		10-Apr-13 18:21	SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100		10-Apr-13 18:21	SLF
72-20-8	Endrin	1	ND		0.100		10-Apr-13 18:21	SLF
7421-93-4	Endrin aldehyde	1	ND		0.100		10-Apr-13 18:21	SLF
76-44-8	Heptachlor	1	ND		0.0500		10-Apr-13 18:21	SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500		10-Apr-13 18:21	SLF
465-73-6	Isodrin	1	ND		0.100		10-Apr-13 18:21	SLF
143-50-0	Kepone	1	ND		1.00		10-Apr-13 18:21	SLF
72-43-5	Methoxychlor	1	ND		0.500		10-Apr-13 18:21	SLF
8001-35-2	Toxaphene	1	ND		2.00		10-Apr-13 18:21	SLF

24 compound(s) reported

Protocol 4/22/2013 15:59:20

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: BSB-GW-01
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079478
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206025
Method: EPA 8151
8151 Herbs Water
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis	
94-74-6	MCPA	1	ND		250.		09-Apr-13 15:01	SPP1
7085-19-0	MCPP	1	ND		250.		09-Apr-13 15:01	SPP1

2 compound(s) reported

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-01
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079478RE1
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206883
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 18-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis	
90-12-0	1-Methylnaphthalene	1	ND	N	10.0		19-Apr-13 16:05	JAM

1 compound(s) reported

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: BSB-GW-02
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079479
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206048
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND	N	10.0		11-Apr-13 15:21 JAM
208-96-8	Acenaphthylene	1	ND	N	10.0		11-Apr-13 15:21 JAM
120-12-7	Anthracene	1	ND	N	10.0		11-Apr-13 15:21 JAM
92-87-5	Benzidine	1	ND	N	30.0		11-Apr-13 15:21 JAM
56-55-3	Benzo(a)anthracene	1	ND	N	10.0		11-Apr-13 15:21 JAM
205-99-2	Benzo(b)fluoranthene	1	ND	N	10.0		11-Apr-13 15:21 JAM
207-08-9	Benzo(k)fluoranthene	1	ND	N	10.0		11-Apr-13 15:21 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND	N	10.0		11-Apr-13 15:21 JAM
50-32-8	Benzo(a)pyrene	1	ND	N	10.0		11-Apr-13 15:21 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND	N	10.0		11-Apr-13 15:21 JAM
85-68-7	Butylbenzylphthalate	1	ND	N	10.0		11-Apr-13 15:21 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND	N	10.0		11-Apr-13 15:21 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND	N	10.0		11-Apr-13 15:21 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND	N	10.0		11-Apr-13 15:21 JAM
91-58-7	2-Chloronaphthalene	1	ND	N	10.0		11-Apr-13 15:21 JAM
95-57-8	2-Chlorophenol	1	ND	N	10.0		11-Apr-13 15:21 JAM
106-48-9	4-Chlorophenol	1	ND	N	10.0		11-Apr-13 15:21 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND	N	10.0		11-Apr-13 15:21 JAM
218-01-9	Chrysene	1	ND	N	10.0		11-Apr-13 15:21 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND	N	10.0		11-Apr-13 15:21 JAM
95-50-1	1,2-Dichlorobenzene	1	ND	N	10.0		11-Apr-13 15:21 JAM
541-73-1	1,3-Dichlorobenzene	1	ND	N	10.0		11-Apr-13 15:21 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND	N	20.0		11-Apr-13 15:21 JAM
120-83-2	2,4-Dichlorophenol	1	ND	N	10.0		11-Apr-13 15:21 JAM
84-66-2	Diethylphthalate	1	ND	N	10.0		11-Apr-13 15:21 JAM
105-67-9	2,4-Dimethylphenol	1	ND	N	10.0		11-Apr-13 15:21 JAM
131-11-3	Dimethylphthalate	1	ND	N	10.0		11-Apr-13 15:21 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND	N	10.0		11-Apr-13 15:21 JAM
51-28-5	2,4-Dinitrophenol	1	ND	N	10.0		11-Apr-13 15:21 JAM
121-14-2	2,4-Dinitrotoluene	1	ND	N	10.0		11-Apr-13 15:21 JAM
606-20-2	2,6-Dinitrotoluene	1	ND	N	10.0		11-Apr-13 15:21 JAM
117-84-0	Di-n-octylphthalate	1	ND	N	10.0		11-Apr-13 15:21 JAM
122-66-7	1,2-Diphenylhydrazine	1	ND	N	10.0		11-Apr-13 15:21 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND	N	10.0		11-Apr-13 15:21 JAM

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Client: PASI Minnesota

Client ID:	BSB-GW-02	**Project:**	20152575		
Project ID:	10224382 / BPAR-PIONEER-MT	**Site:**	None		
Lab ID:	201079479	**Matrix:**	Water	**% Moisture:**	n/a
Description:	None	**Prep Level:**	Water	**Batch:**	206048
Method:	EPA 8270 GCMS SVOAs Dual pH	**Collected:**	02-Apr-13	**Received:**	05-Apr-13
		Prepared:	08-Apr-13		

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis	
206-44-0	Fluoranthene	1	ND	N	10.0		11-Apr-13 15:21	JAM
86-73-7	Fluorene	1	ND	N	10.0		11-Apr-13 15:21	JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND	N	10.0		11-Apr-13 15:21	JAM
118-74-1	Hexachlorobenzene	1	ND	N	10.0		11-Apr-13 15:21	JAM
77-47-4	Hexachlorocyclopentadiene	1	ND	N	10.0		11-Apr-13 15:21	JAM
67-72-1	Hexachloroethane	1	ND	N	10.0		11-Apr-13 15:21	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND	N	10.0		11-Apr-13 15:21	JAM
78-59-1	Isophorone	1	ND	N	10.0		11-Apr-13 15:21	JAM
90-12-0	1-Methylnaphthalene	1	ND	N	10.0		11-Apr-13 15:21	JAM
91-57-6	2-Methylnaphthalene	1	ND	N	10.0		11-Apr-13 15:21	JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND	N	10.0		11-Apr-13 15:21	JAM
	3&4-Methylphenol	1	ND	N	10.0		11-Apr-13 15:21	JAM
91-20-3	Naphthalene	1	ND	N	10.0		11-Apr-13 15:21	JAM
98-95-3	Nitrobenzene	1	ND	N	10.0		11-Apr-13 15:21	JAM
88-75-5	2-Nitrophenol	1	ND	N	10.0		11-Apr-13 15:21	JAM
100-02-7	4-Nitrophenol	1	ND	N	10.0		11-Apr-13 15:21	JAM
62-75-9	N-Nitrosodimethylamine	1	ND	N	10.0		11-Apr-13 15:21	JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND	N	10.0		11-Apr-13 15:21	JAM
86-30-6	N-Nitrosodiphenylamine	1	ND	N	10.0		11-Apr-13 15:21	JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND	N	10.0		11-Apr-13 15:21	JAM
87-86-5	Pentachlorophenol	1	ND	N	10.0		11-Apr-13 15:21	JAM
85-01-8	Phenanthrene	1	ND	N	10.0		11-Apr-13 15:21	JAM
108-95-2	Phenol	1	ND	N	10.0		11-Apr-13 15:21	JAM
129-00-0	Pyrene	1	ND	N	10.0		11-Apr-13 15:21	JAM
110-86-1	Pyridine	1	ND	N	10.0		11-Apr-13 15:21	JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND	N	10.0		11-Apr-13 15:21	JAM
95-95-4	2,4,5-Trichlorophenol	1	ND	N	10.0		11-Apr-13 15:21	JAM
88-06-2	2,4,6-Trichlorophenol	1	ND	N	10.0		11-Apr-13 15:21	JAM

62 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID:	BSB-GW-02	**Project:**	20152575		
Project ID:	10224382 / BPAR-PIONEER-MT	**Site:**	None		
Lab ID:	201079479	**Matrix:**	Water	**% Moisture:**	n/a
Description:	None	**Prep Level:**	Water	**Batch:**	206023
Method:	EPA 8081 8081 Pests Water	**Collected:**	02-Apr-13	**Received:**	05-Apr-13
		Prepared:	08-Apr-13		

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis	
309-00-2	Aldrin	1	ND		0.0500		10-Apr-13 18:34	SLF
319-84-6	alpha-BHC	1	ND		0.0500		10-Apr-13 18:34	SLF
319-85-7	beta-BHC	1	ND		0.0500		10-Apr-13 18:34	SLF
319-86-8	delta-BHC	1	ND		0.0500		10-Apr-13 18:34	SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500		10-Apr-13 18:34	SLF
5103-71-9	alpha-Chlordane	1	ND		0.0500		10-Apr-13 18:34	SLF
5103-74-2	gamma-Chlordane	1	ND		0.0500		10-Apr-13 18:34	SLF
510-15-6	Chlorobenzilate	1	ND		1.00		10-Apr-13 18:34	SLF
72-54-8	4,4'-DDD	1	ND		0.100		10-Apr-13 18:34	SLF
72-55-9	4,4'-DDE	1	ND		0.100		10-Apr-13 18:34	SLF
50-29-3	4,4'-DDT	1	ND		0.100		10-Apr-13 18:34	SLF
2303-16-4	Diallate	1	ND		1.00		10-Apr-13 18:34	SLF
60-57-1	Dieldrin	1	ND		0.100		10-Apr-13 18:34	SLF
959-98-8	Endosulfan I	1	ND		0.0500		10-Apr-13 18:34	SLF
33213-65-9	Endosulfan II	1	ND		0.100		10-Apr-13 18:34	SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100		10-Apr-13 18:34	SLF
72-20-8	Endrin	1	ND		0.100		10-Apr-13 18:34	SLF
7421-93-4	Endrin aldehyde	1	ND		0.100		10-Apr-13 18:34	SLF
76-44-8	Heptachlor	1	ND		0.0500		10-Apr-13 18:34	SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500		10-Apr-13 18:34	SLF
465-73-6	Isodrin	1	ND		0.100		10-Apr-13 18:34	SLF
143-50-0	Kepone	1	ND		1.00		10-Apr-13 18:34	SLF
72-43-5	Methoxychlor	1	ND		0.500		10-Apr-13 18:34	SLF
8001-35-2	Toxaphene	1	ND		2.00		10-Apr-13 18:34	SLF

24 compound(s) reported

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Client: PASI Minnesota

Client ID: BSB-GW-02
Project ID: 10224382 / BPAR-PIONEER-MT
Lab ID: 201079479
Description: None
Method: EPA 8151
8151 Herbs Water

Project: 20152575
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 206025
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
94-74-6	MCPA	1	ND		250.		09-Apr-13 15:17 SPP1
7085-19-0	MCPP	1	ND		250.		09-Apr-13 15:17 SPP1

2 compound(s) reported

Protocol 4/22/2013 15:59:21

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

		Client:	PASI Minnesota		
Client ID:	BSB-GW-02	**Project:**	20152575		
Project ID:	10224382 / BPAR-PIONEER-MT	**Site:**	None		
Lab ID:	201079479RE1	**Matrix:**	Water	**% Moisture:**	n/a
Description:	None	**Prep Level:**	Water	**Batch:**	206883
Method:	EPA 8270 GCMS SVOAs Dual pH	**Collected:**	02-Apr-13	**Received:**	05-Apr-13
		Prepared:	18-Apr-13		

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
90-12-0	1-Methylnaphthalene	1	ND	N	10.0		19-Apr-13 16:31 JAM

1 compound(s) reported

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-03
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079480
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206048
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND	N	10.0		11-Apr-13 15:47 JAM
208-96-8	Acenaphthylene	1	ND	N	10.0		11-Apr-13 15:47 JAM
120-12-7	Anthracene	1	ND	N	10.0		11-Apr-13 15:47 JAM
92-87-5	Benzidine	1	ND	N	30.0		11-Apr-13 15:47 JAM
56-55-3	Benzo(a)anthracene	1	ND	N	10.0		11-Apr-13 15:47 JAM
205-99-2	Benzo(b)fluoranthene	1	ND	N	10.0		11-Apr-13 15:47 JAM
207-08-9	Benzo(k)fluoranthene	1	ND	N	10.0		11-Apr-13 15:47 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND	N	10.0		11-Apr-13 15:47 JAM
50-32-8	Benzo(a)pyrene	1	ND	N	10.0		11-Apr-13 15:47 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND	N	10.0		11-Apr-13 15:47 JAM
85-68-7	Butylbenzylphthalate	1	ND	N	10.0		11-Apr-13 15:47 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND	N	10.0		11-Apr-13 15:47 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND	N	10.0		11-Apr-13 15:47 JAM
91-58-7	2-Chloronaphthalene	1	ND	N	10.0		11-Apr-13 15:47 JAM
95-57-8	2-Chlorophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
106-48-9	4-Chlorophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND	N	10.0		11-Apr-13 15:47 JAM
218-01-9	Chrysene	1	ND	N	10.0		11-Apr-13 15:47 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND	N	10.0		11-Apr-13 15:47 JAM
95-50-1	1,2-Dichlorobenzene	1	ND	N	10.0		11-Apr-13 15:47 JAM
541-73-1	1,3-Dichlorobenzene	1	ND	N	10.0		11-Apr-13 15:47 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND	N	20.0		11-Apr-13 15:47 JAM
120-83-2	2,4-Dichlorophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
84-66-2	Diethylphthalate	1	ND	N	10.0		11-Apr-13 15:47 JAM
105-67-9	2,4-Dimethylphenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
131-11-3	Dimethylphthalate	1	ND	N	10.0		11-Apr-13 15:47 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
51-28-5	2,4-Dinitrophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
121-14-2	2,4-Dinitrotoluene	1	ND	N	10.0		11-Apr-13 15:47 JAM
606-20-2	2,6-Dinitrotoluene	1	ND	N	10.0		11-Apr-13 15:47 JAM
117-84-0	Di-n-octylphthalate	1	ND	N	10.0		11-Apr-13 15:47 JAM
122-66-7	1,2-Diphenylhydrazine	1	ND	N	10.0		11-Apr-13 15:47 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND	N	10.0		11-Apr-13 15:47 JAM

Protocol 4/22/2013 15:59:21

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Client: PASI Minnesota

Client ID: BSB-GW-03
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079480
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206048
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
206-44-0	Fluoranthene	1	ND	N	10.0		11-Apr-13 15:47 JAM
86-73-7	Fluorene	1	ND	N	10.0		11-Apr-13 15:47 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND	N	10.0		11-Apr-13 15:47 JAM
118-74-1	Hexachlorobenzene	1	ND	N	10.0		11-Apr-13 15:47 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND	N	10.0		11-Apr-13 15:47 JAM
67-72-1	Hexachloroethane	1	ND	N	10.0		11-Apr-13 15:47 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND	N	10.0		11-Apr-13 15:47 JAM
78-59-1	Isophorone	1	ND	N	10.0		11-Apr-13 15:47 JAM
90-12-0	1-Methylnaphthalene	1	ND	N	10.0		11-Apr-13 15:47 JAM
91-57-6	2-Methylnaphthalene	1	ND	N	10.0		11-Apr-13 15:47 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND	N	10.0		11-Apr-13 15:47 JAM
	3&4-Methylphenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
91-20-3	Naphthalene	1	ND	N	10.0		11-Apr-13 15:47 JAM
98-95-3	Nitrobenzene	1	ND	N	10.0		11-Apr-13 15:47 JAM
88-75-5	2-Nitrophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
100-02-7	4-Nitrophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
62-75-9	N-Nitrosodimethylamine	1	ND	N	10.0		11-Apr-13 15:47 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND	N	10.0		11-Apr-13 15:47 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND	N	10.0		11-Apr-13 15:47 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND	N	10.0		11-Apr-13 15:47 JAM
87-86-5	Pentachlorophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
85-01-8	Phenanthrene	1	ND	N	10.0		11-Apr-13 15:47 JAM
108-95-2	Phenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
129-00-0	Pyrene	1	ND	N	10.0		11-Apr-13 15:47 JAM
110-86-1	Pyridine	1	ND	N	10.0		11-Apr-13 15:47 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND	N	10.0		11-Apr-13 15:47 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND	N	10.0		11-Apr-13 15:47 JAM

62 compound(s) reported

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-03
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079480
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206023
Method: EPA 8081
8081 Pests Water
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis	
309-00-2	Aldrin	1	ND		0.0500		10-Apr-13 18:46	SLF
319-84-6	alpha-BHC	1	ND		0.0500		10-Apr-13 18:46	SLF
319-85-7	beta-BHC	1	ND		0.0500		10-Apr-13 18:46	SLF
319-86-8	delta-BHC	1	ND		0.0500		10-Apr-13 18:46	SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500		10-Apr-13 18:46	SLF
5103-71-9	alpha-Chlordane	1	ND		0.0500		10-Apr-13 18:46	SLF
5103-74-2	gamma-Chlordane	1	ND		0.0500		10-Apr-13 18:46	SLF
510-15-6	Chlorobenzilate	1	ND		1.00		10-Apr-13 18:46	SLF
72-54-8	4,4'-DDD	1	ND		0.100		10-Apr-13 18:46	SLF
72-55-9	4,4'-DDE	1	ND		0.100		10-Apr-13 18:46	SLF
50-29-3	4,4'-DDT	1	ND		0.100		10-Apr-13 18:46	SLF
2303-16-4	Diallate	1	ND		1.00		10-Apr-13 18:46	SLF
60-57-1	Dieldrin	1	ND		0.100		10-Apr-13 18:46	SLF
959-98-8	Endosulfan I	1	ND		0.0500		10-Apr-13 18:46	SLF
33213-65-9	Endosulfan II	1	ND		0.100		10-Apr-13 18:46	SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100		10-Apr-13 18:46	SLF
72-20-8	Endrin	1	ND		0.100		10-Apr-13 18:46	SLF
7421-93-4	Endrin aldehyde	1	ND		0.100		10-Apr-13 18:46	SLF
76-44-8	Heptachlor	1	ND		0.0500		10-Apr-13 18:46	SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500		10-Apr-13 18:46	SLF
465-73-6	Isodrin	1	ND		0.100		10-Apr-13 18:46	SLF
143-50-0	Kepone	1	ND		1.00		10-Apr-13 18:46	SLF
72-43-5	Methoxychlor	1	ND		0.500		10-Apr-13 18:46	SLF
8001-35-2	Toxaphene	1	ND		2.00		10-Apr-13 18:46	SLF

24 compound(s) reported

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-03
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079480
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206025
Method: EPA 8151
8151 Herbs Water
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
94-74-6	MCPA	1	ND		250.		09-Apr-13 15:33 SPP1
7085-19-0	MCPP	1	ND		250.		09-Apr-13 15:33 SPP1

2 compound(s) reported

Protocol 4/22/2013 15:59:21

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID: BSB-GW-03
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079480RE1
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206883
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 18-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
90-12-0	1-Methylnaphthalene	1	ND	N	10.0		19-Apr-13 16:57 JAM

1 compound(s) reported

Protocol 4/22/2013 15:59:21

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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: PASI Minnesota

Client ID:	BSB-GW-04	**Project:**	20152575		
Project ID:	10224382 / BPAR-PIONEER-MT	**Site:**	None		
Lab ID:	201079481	**Matrix:**	Water	**% Moisture:**	n/a
Description:	None	**Prep Level:**	Water	**Batch:**	206048
Method:	EPA 8270 GCMS SVOAs Dual pH	**Collected:**	02-Apr-13	**Received:**	05-Apr-13
		Prepared:	08-Apr-13		

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND	N	10.0		11-Apr-13 16:12 JAM
208-96-8	Acenaphthylene	1	ND	N	10.0		11-Apr-13 16:12 JAM
120-12-7	Anthracene	1	ND	N	10.0		11-Apr-13 16:12 JAM
92-87-5	Benzidine	1	ND	N	30.0		11-Apr-13 16:12 JAM
56-55-3	Benzo(a)anthracene	1	ND	N	10.0		11-Apr-13 16:12 JAM
205-99-2	Benzo(b)fluoranthene	1	ND	N	10.0		11-Apr-13 16:12 JAM
207-08-9	Benzo(k)fluoranthene	1	ND	N	10.0		11-Apr-13 16:12 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND	N	10.0		11-Apr-13 16:12 JAM
50-32-8	Benzo(a)pyrene	1	ND	N	10.0		11-Apr-13 16:12 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND	N	10.0		11-Apr-13 16:12 JAM
85-68-7	Butylbenzylphthalate	1	ND	N	10.0		11-Apr-13 16:12 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND	N	10.0		11-Apr-13 16:12 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND	N	10.0		11-Apr-13 16:12 JAM
91-58-7	2-Chloronaphthalene	1	ND	N	10.0		11-Apr-13 16:12 JAM
95-57-8	2-Chlorophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
106-48-9	4-Chlorophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND	N	10.0		11-Apr-13 16:12 JAM
218-01-9	Chrysene	1	ND	N	10.0		11-Apr-13 16:12 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND	N	10.0		11-Apr-13 16:12 JAM
95-50-1	1,2-Dichlorobenzene	1	ND	N	10.0		11-Apr-13 16:12 JAM
541-73-1	1,3-Dichlorobenzene	1	ND	N	10.0		11-Apr-13 16:12 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND	N	20.0		11-Apr-13 16:12 JAM
120-83-2	2,4-Dichlorophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
84-66-2	Diethylphthalate	1	ND	N	10.0		11-Apr-13 16:12 JAM
105-67-9	2,4-Dimethylphenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
131-11-3	Dimethylphthalate	1	ND	N	10.0		11-Apr-13 16:12 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
51-28-5	2,4-Dinitrophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
121-14-2	2,4-Dinitrotoluene	1	ND	N	10.0		11-Apr-13 16:12 JAM
606-20-2	2,6-Dinitrotoluene	1	ND	N	10.0		11-Apr-13 16:12 JAM
117-84-0	Di-n-octylphthalate	1	ND	N	10.0		11-Apr-13 16:12 JAM
122-66-7	1,2-Diphenylhydrazine	1	ND	N	10.0		11-Apr-13 16:12 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND	N	10.0		11-Apr-13 16:12 JAM

Protocol 4/22/2013 15:59:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-04
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079481
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206048
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
206-44-0	Fluoranthene	1	ND	N	10.0		11-Apr-13 16:12 JAM
86-73-7	Fluorene	1	ND	N	10.0		11-Apr-13 16:12 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND	N	10.0		11-Apr-13 16:12 JAM
118-74-1	Hexachlorobenzene	1	ND	N	10.0		11-Apr-13 16:12 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND	N	10.0		11-Apr-13 16:12 JAM
67-72-1	Hexachloroethane	1	ND	N	10.0		11-Apr-13 16:12 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND	N	10.0		11-Apr-13 16:12 JAM
78-59-1	Isophorone	1	ND	N	10.0		11-Apr-13 16:12 JAM
90-12-0	1-Methylnaphthalene	1	ND	N	10.0		11-Apr-13 16:12 JAM
91-57-6	2-Methylnaphthalene	1	ND	N	10.0		11-Apr-13 16:12 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND	N	10.0		11-Apr-13 16:12 JAM
	3&4-Methylphenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
91-20-3	Naphthalene	1	ND	N	10.0		11-Apr-13 16:12 JAM
98-95-3	Nitrobenzene	1	ND	N	10.0		11-Apr-13 16:12 JAM
88-75-5	2-Nitrophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
100-02-7	4-Nitrophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
62-75-9	N-Nitrosodimethylamine	1	ND	N	10.0		11-Apr-13 16:12 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND	N	10.0		11-Apr-13 16:12 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND	N	10.0		11-Apr-13 16:12 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND	N	10.0		11-Apr-13 16:12 JAM
87-86-5	Pentachlorophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
85-01-8	Phenanthrene	1	ND	N	10.0		11-Apr-13 16:12 JAM
108-95-2	Phenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
129-00-0	Pyrene	1	ND	N	10.0		11-Apr-13 16:12 JAM
110-86-1	Pyridine	1	ND	N	10.0		11-Apr-13 16:12 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND	N	10.0		11-Apr-13 16:12 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND	N	10.0		11-Apr-13 16:12 JAM

62 compound(s) reported

Protocol 4/22/2013 15:59:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-04
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079481
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206023
Method: EPA 8081
8081 Pests Water
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis	
309-00-2	Aldrin	1	ND		0.0500		10-Apr-13 18:59	SLF
319-84-6	alpha-BHC	1	ND		0.0500		10-Apr-13 18:59	SLF
319-85-7	beta-BHC	1	ND		0.0500		10-Apr-13 18:59	SLF
319-86-8	delta-BHC	1	ND		0.0500		10-Apr-13 18:59	SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500		10-Apr-13 18:59	SLF
5103-71-9	alpha-Chlordane	1	ND		0.0500		10-Apr-13 18:59	SLF
5103-74-2	gamma-Chlordane	1	ND		0.0500		10-Apr-13 18:59	SLF
510-15-6	Chlorobenzilate	1	ND		1.00		10-Apr-13 18:59	SLF
72-54-8	4,4'-DDD	1	ND		0.100		10-Apr-13 18:59	SLF
72-55-9	4,4'-DDE	1	ND		0.100		10-Apr-13 18:59	SLF
50-29-3	4,4'-DDT	1	ND		0.100		10-Apr-13 18:59	SLF
2303-16-4	Diallate	1	ND		1.00		10-Apr-13 18:59	SLF
60-57-1	Dieldrin	1	ND		0.100		10-Apr-13 18:59	SLF
959-98-8	Endosulfan I	1	ND		0.0500		10-Apr-13 18:59	SLF
33213-65-9	Endosulfan II	1	ND		0.100		10-Apr-13 18:59	SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100		10-Apr-13 18:59	SLF
72-20-8	Endrin	1	ND		0.100		10-Apr-13 18:59	SLF
7421-93-4	Endrin aldehyde	1	ND		0.100		10-Apr-13 18:59	SLF
76-44-8	Heptachlor	1	ND		0.0500		10-Apr-13 18:59	SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500		10-Apr-13 18:59	SLF
465-73-6	Isodrin	1	ND		0.100		10-Apr-13 18:59	SLF
143-50-0	Kepone	1	ND		1.00		10-Apr-13 18:59	SLF
72-43-5	Methoxychlor	1	ND		0.500		10-Apr-13 18:59	SLF
8001-35-2	Toxaphene	1	ND		2.00		10-Apr-13 18:59	SLF

24 compound(s) reported

Protocol 4/22/2013 15:59:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Client: PASI Minnesota

Client ID: BSB-GW-04
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079481
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206025
Method: EPA 8151
8151 Herbs Water
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
94-74-6	MCPA	1	ND		250.		11-Apr-13 10:40 SPP1
7085-19-0	MCPP	1	ND		250.		11-Apr-13 10:40 SPP1

2 compound(s) reported

Protocol 4/22/2013 15:59:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Client: PASI Minnesota

Client ID: BSB-GW-04
Project: 20152575
Project ID: 10224382 / BPAR-PIONEER-MT
Site: None
Lab ID: 201079481RE1
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206883
Method: EPA 8270
GCMS SVOAs Dual pH
Collected: 02-Apr-13
Received: 05-Apr-13
Prepared: 18-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	Reg Limit	Analysis
90-12-0	1-Methylnaphthalene	1	ND	N	10.0		19-Apr-13 17:23 JAM

1 compound(s) reported

Protocol 4/22/2013 15:59:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Surrogate Recovery

Batch: 206048 **Project:** 20152575

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079630	206048 BLANK 1		76	93	41	101	73	103		
201079631	206048 LCS 1		71	75	54	64	62	80		
201079478	BSB-GW-01	N	121	86	66	91	88	108		
201079479	BSB-GW-02	N	31	85	34	73	57	102		
201079480	BSB-GW-03	N	32	70	21	76	24	82		
201079481	BSB-GW-04	N	23 *	71	18	64	29	90		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

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* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 206883 **Project:** 20152575

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201083055	206883 BLANK 1		76	86	70	90	71	109		
201083056	206883 LCS 1		61	62	50	52	56	72		
201079478	BSB-GW-01	N	75	82	66	88	70	105		
201079479	BSB-GW-02	N	73	82	64	87	70	105		
201079480	BSB-GW-03	N	9 *	74	2 *	79	4 *	76		
201079481	BSB-GW-04	N	74	72	59	77	64	94		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Batch: 206023 **Project:** 20152575

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079555	206023 BLANK 1		74	83	58	62				
201079556	206023 LCS 1		66	77	48	59				
201079478	BSB-GW-01		60	70	49	47				
201079479	BSB-GW-02		64	69	46	46				
201079480	BSB-GW-03		76	89	69	63				
201079481	BSB-GW-04		37	47	46	48				
	QC limits:		10-137	10-137	18-119	18-119				

Sur 1: Decachlorobiphenyl (Conf)(S)
Sur 2: Decachlorobiphenyl (S)
Sur 3: Tetrachloro-m-xylene (Conf)(S)
Sur 4: Tetrachloro-m-xylene (S)

* denotes surrogate recovery outside of QC limits.
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Surrogate Recovery

Batch: 206025 **Project:** 20152575

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079559	206025 BLANK 1		94	82						
201079560	206025 LCS 1		66	62						
201079478	BSB-GW-01		113	100						
201079479	BSB-GW-02		94	82						
201079480	BSB-GW-03		99	86						
201079481	BSB-GW-04		70	73						
	QC limits:		10-166	10-166						

Sur 1: 2,4-DCPA (Conf)(S)
Sur 2: 2,4-DCPA (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Quality Control

Batch: 206048 **Project:** 20152575 **LCS:** 201079631 11-Apr-13 13:12

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	50.0	36.2	72								53-115			Q5
Acenaphthylene	50.0	37.7	75								49-115			Q5
Anthracene	50.0	36.0	72								54-115			Q5
Benzo(a)anthracene	50.0	36.9	74								55-115			Q5
Benzo(b)fluoranthene	50.0	36.7	73								49-115			Q5
Benzo(k)fluoranthene	50.0	39.4	79								51-115			Q5
Benzo(g,h,i)perylene	50.0	43.1	86								43-115			Q5
Benzo(a)pyrene	50.0	40.1	80								51-115			Q5
4-Bromophenylphenyl ether	50.0	34.0	68								48-115			Q5
Butylbenzylphthalate	50.0	30.0	60								46-116			Q5
4-Chloro-3-methylphenol	50.0	31.4	63								40-115			Q5
bis(2-Chloroethoxy)methane	50.0	28.2	57								42-115			Q5
bis(2-Chloroethyl) ether	50.0	30.8	62								47-115			Q5
2-Chloronaphthalene	50.0	34.9	70								53-115			Q5
2-Chlorophenol	50.0	33.0	66								45-115			Q5
4-Chlorophenylphenyl ether	50.0	35.1	70								51-115			Q5
Chrysene	50.0	37.1	74								54-115			Q5
Dibenz(a,h)anthracene	50.0	42.4	85								44-118			Q5
1,2-Dichlorobenzene	50.0	33.3	67								46-115			Q5
1,3-Dichlorobenzene	50.0	31.8	64								43-115			Q5
3,3'-Dichlorobenzidine	50.0	37.8	76								25-132			Q5
2,4-Dichlorophenol	50.0	32.5	65								42-115			Q5
Diethylphthalate	50.0	31.5	63								49-115			Q5
2,4-Dimethylphenol	50.0	18.1	36								24-115			Q5
Dimethylphthalate	50.0	31.0	62								50-115			Q5
4,6-Dinitro-2-methylphenol	50.0	34.9	70								37-117			Q5
2,4-Dinitrophenol	50.0	27.5	55								10-127			Q5
2,4-Dinitrotoluene	50.0	32.5	65								50-115			Q5
2,6-Dinitrotoluene	50.0	32.5	65								52-115			Q5
Di-n-octylphthalate	50.0	29.9	60								40-124			Q5
1,2-Diphenylhydrazine	50.0	33.8	68								51-115			Q5
bis(2-Ethylhexyl)phthalate	50.0	31.0	62								44-121			Q5
Fluoranthene	50.0	34.6	69								50-115			Q5
Fluorene	50.0	35.6	71								53-115			Q5
Hexachloro-1,3-butadiene	50.0	34.7	70								34-115			Q5
Hexachlorobenzene	50.0	33.9	68								51-115			Q5
Hexachlorocyclopentadiene	50.0	25.9	52								10-115			Q5
Hexachloroethane	50.0	32.4	65								40-115			Q5
Indeno(1,2,3-cd)pyrene	50.0	43.7	87								46-115			Q5
Isophorone	50.0	29.7	59								43-115			Q5
1-Methylnaphthalene	50.0	23.6	47 *								59-115			Q5

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Quality Control

Batch: 206048 **Project:** 20152575 **LCS:** 201079631 11-Apr-13 13:12

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
2-Methylnaphthalene	50.0	31.3	63								43-115			Q5
2-Methylphenol (o-Cresol)	50.0	31.9	64								48-115			Q5
3&4-Methylphenol	50.0	29.5	59								46-115			Q5
Naphthalene	50.0	37.1	74								39-115			Q5
Nitrobenzene	50.0	30.7	61								44-115			Q5
2-Nitrophenol	50.0	32.7	66								41-115			Q5
4-Nitrophenol	50.0	32.2	64								30-126			Q5
N-Nitrosodimethylamine	50.0	31.0	62								42-115			Q5
N-Nitroso-di-n-propylamine	50.0	29.1	58								46-115			Q5
N-Nitrosodiphenylamine	50.0	40.4	81								41-127			Q5
2,2'-Oxybis(1-chloropropane)	50.0	32.6	65								40-115			Q5
Pentachlorophenol	50.0	29.0	58								32-121			Q5
Phenanthrene	50.0	36.3	73								54-115			Q5
Phenol	50.0	33.8	68								43-115			Q5
Pyrene	50.0	35.6	71								48-115			Q5
Pyridine	50.0	29.0	58								27-115			Q5
1,2,4-Trichlorobenzene	50.0	32.8	66								40-115			Q5
2,4,5-Trichlorophenol	50.0	35.9	72								47-115			Q5
2,4,6-Trichlorophenol	50.0	36.6	73								48-115			Q5

60 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical™

Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 206883
Method: Water GC/MS Semivolatile Organics

Project: 20152575
Units: ug/L

LCS: 201083056 19-Apr-13 15:40
MS:
MSD:
Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1-Methylnaphthalene	50.0	34.7	69								59-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/22/2013 15:59:26

Quality Control

Batch: 206023 **Project:** 20152575 **LCS:** 201079556 10-Apr-13 18:08
Method: Water GC Semivolatile Organics **MS:**
Units: ug/L **MSD:**
Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Aldrin	0.500	0.135	27								10-115			Q5
alpha-BHC	0.500	0.383	77								27-124			Q5
beta-BHC	0.500	0.388	78								32-131			Q5
delta-BHC	0.500	0.317	63								28-134			Q5
gamma-BHC (Lindane)	0.500	0.324	65								28-128			Q5
alpha-Chlordane	0.500	0.309	62								21-116			Q5
gamma-Chlordane	0.500	0.293	59								16-116			Q5
4,4'-DDD	0.500	0.383	77								29-130			Q5
4,4'-DDE	0.500	0.298	60								15-115			Q5
4,4'-DDT	0.500	0.374	75								24-115			Q5
Dieldrin	0.500	0.315	63								31-121			Q5
Endosulfan I	0.500	0.285	57								13-115			Q5
Endosulfan II	0.500	0.330	66								14-115			Q5
Endosulfan sulfate	0.500	0.347	69								33-133			Q5
Endrin	0.500	0.253	51								20-153			Q5
Endrin aldehyde	0.500	0.290	58								27-129			Q5
Heptachlor	0.500	0.244	49								10-115			Q5
Heptachlor epoxide	0.500	0.318	64								30-119			Q5
Methoxychlor	0.500	0.324	65								21-150			Q5

19 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/22/2013 15:59:26

Quality Control

Batch: 206025
Method: Water GC Semivolatile Organics
Project: 20152575
Units: ug/L
LCS: 201079560 09-Apr-13 14:45
MS:
MSD:
Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
MCPA	2000	701.	35								10-140			Q5
MCPP	2000	880.	44								23-142			Q5

2 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/22/2013 15:59:26

Blank ID: 206048 BLANK 1 **Project:** 20152575

Lab ID: 201079630

Prep Level: Water **Batch:** 206048

Method: Water GC/MS Semivolatile Organics

Prepared: 08-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	Analysis
83-32-9	Acenaphthene	1	ND		10.0	11-Apr-13 12:47 JAM
208-96-8	Acenaphthylene	1	ND		10.0	11-Apr-13 12:47 JAM
120-12-7	Anthracene	1	ND		10.0	11-Apr-13 12:47 JAM
92-87-5	Benzidine	1	ND		30.0	11-Apr-13 12:47 JAM
56-55-3	Benzo(a)anthracene	1	ND		10.0	11-Apr-13 12:47 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	11-Apr-13 12:47 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		10.0	11-Apr-13 12:47 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	11-Apr-13 12:47 JAM
50-32-8	Benzo(a)pyrene	1	ND		10.0	11-Apr-13 12:47 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	11-Apr-13 12:47 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	11-Apr-13 12:47 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	11-Apr-13 12:47 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	11-Apr-13 12:47 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	11-Apr-13 12:47 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	11-Apr-13 12:47 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	11-Apr-13 12:47 JAM
106-48-9	4-Chlorophenol	1	ND		10.0	11-Apr-13 12:47 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	11-Apr-13 12:47 JAM
218-01-9	Chrysene	1	ND		10.0	11-Apr-13 12:47 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	11-Apr-13 12:47 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	11-Apr-13 12:47 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	11-Apr-13 12:47 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	11-Apr-13 12:47 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	11-Apr-13 12:47 JAM
84-66-2	Diethylphthalate	1	ND		10.0	11-Apr-13 12:47 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	11-Apr-13 12:47 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	11-Apr-13 12:47 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	11-Apr-13 12:47 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	11-Apr-13 12:47 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	11-Apr-13 12:47 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	11-Apr-13 12:47 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	11-Apr-13 12:47 JAM
122-66-7	1,2-Diphenylhydrazine	1	ND		10.0	11-Apr-13 12:47 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	11-Apr-13 12:47 JAM

Protocol Blank 4/22/2013 15:59:2

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 206048 BLANK 1

Project: 20152575

Lab ID: 201079630

Prep Level: Water

Batch: 206048

Method: Water GC/MS Semivolatile Organics

Prepared: 08-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	Analysis
206-44-0	Fluoranthene	1	ND		10.0	11-Apr-13 12:47 JAM
86-73-7	Fluorene	1	ND		10.0	11-Apr-13 12:47 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	11-Apr-13 12:47 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	11-Apr-13 12:47 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	11-Apr-13 12:47 JAM
67-72-1	Hexachloroethane	1	ND		10.0	11-Apr-13 12:47 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	11-Apr-13 12:47 JAM
78-59-1	Isophorone	1	ND		10.0	11-Apr-13 12:47 JAM
90-12-0	1-Methylnaphthalene	1	ND		10.0	11-Apr-13 12:47 JAM
91-57-6	2-Methylnaphthalene	1	ND		10.0	11-Apr-13 12:47 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	11-Apr-13 12:47 JAM
	3&4-Methylphenol	1	ND		10.0	11-Apr-13 12:47 JAM
91-20-3	Naphthalene	1	ND		10.0	11-Apr-13 12:47 JAM
98-95-3	Nitrobenzene	1	ND		10.0	11-Apr-13 12:47 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	11-Apr-13 12:47 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	11-Apr-13 12:47 JAM
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	11-Apr-13 12:47 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	11-Apr-13 12:47 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	11-Apr-13 12:47 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	11-Apr-13 12:47 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	11-Apr-13 12:47 JAM
85-01-8	Phenanthrene	1	ND		10.0	11-Apr-13 12:47 JAM
108-95-2	Phenol	1	ND		10.0	11-Apr-13 12:47 JAM
129-00-0	Pyrene	1	ND		10.0	11-Apr-13 12:47 JAM
110-86-1	Pyridine	1	ND		10.0	11-Apr-13 12:47 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	11-Apr-13 12:47 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	11-Apr-13 12:47 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	11-Apr-13 12:47 JAM

62 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank Results

Blank ID: 206883 BLANK 1

Project: 20152575

Lab ID: 201083055

Prep Level: Water

Batch: 206883

Method: Water GC/MS Semivolatile Organics

Prepared: 18-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	Analysis	
90-12-0	1-Methylnaphthalene	1	ND		10.0	19-Apr-13 15:14	JAM

1 compound(s) reported

Protocol Blank 4/22/2013 15:59:2

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 206023 BLANK 1

Project: 20152575

Lab ID: 201079555

Prep Level: Water

Batch: 206023

Method: Water GC Semivolatile Organics

Prepared: 08-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	Analysis	
309-00-2	Aldrin	1	ND		0.0500	10-Apr-13 17:55	SLF
319-84-6	alpha-BHC	1	ND		0.0500	10-Apr-13 17:55	SLF
319-85-7	beta-BHC	1	ND		0.0500	10-Apr-13 17:55	SLF
319-86-8	delta-BHC	1	ND		0.0500	10-Apr-13 17:55	SLF
58-89-9	gamma-BHC (Lindane)	1	ND		0.0500	10-Apr-13 17:55	SLF
5103-71-9	alpha-Chlordane	1	ND		0.0500	10-Apr-13 17:55	SLF
5103-74-2	gamma-Chlordane	1	ND		0.0500	10-Apr-13 17:55	SLF
510-15-6	Chlorobenzilate	1	ND		1.00	10-Apr-13 17:55	SLF
72-54-8	4,4'-DDD	1	ND		0.100	10-Apr-13 17:55	SLF
72-55-9	4,4'-DDE	1	ND		0.100	10-Apr-13 17:55	SLF
50-29-3	4,4'-DDT	1	ND		0.100	10-Apr-13 17:55	SLF
2303-16-4	Diallate	1	ND		1.00	10-Apr-13 17:55	SLF
60-57-1	Dieldrin	1	ND		0.100	10-Apr-13 17:55	SLF
959-98-8	Endosulfan I	1	ND		0.0500	10-Apr-13 17:55	SLF
33213-65-9	Endosulfan II	1	ND		0.100	10-Apr-13 17:55	SLF
1031-07-8	Endosulfan sulfate	1	ND		0.100	10-Apr-13 17:55	SLF
72-20-8	Endrin	1	ND		0.100	10-Apr-13 17:55	SLF
7421-93-4	Endrin aldehyde	1	ND		0.100	10-Apr-13 17:55	SLF
76-44-8	Heptachlor	1	ND		0.0500	10-Apr-13 17:55	SLF
1024-57-3	Heptachlor epoxide	1	ND		0.0500	10-Apr-13 17:55	SLF
465-73-6	Isodrin	1	ND		0.100	10-Apr-13 17:55	SLF
143-50-0	Kepone	1	ND		1.00	10-Apr-13 17:55	SLF
72-43-5	Methoxychlor	1	ND		0.500	10-Apr-13 17:55	SLF
8001-35-2	Toxaphene	1	ND		2.00	10-Apr-13 17:55	SLF

24 compound(s) reported

Protocol Blank 4/22/2013 15:59:2

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Blank ID: 206025 BLANK 1 **Project:** 20152575

Lab ID: 201079559

Prep Level: Water **Batch:** 206025

Method: Water GC Semivolatile Organics

Prepared: 08-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	Analysis	
94-74-6	MCPA	1	ND		250.	09-Apr-13 14:28	SPP1
7085-19-0	MCPP	1	ND		250.	09-Apr-13 14:28	SPP1

2 compound(s) reported

Protocol Blank 4/22/2013 15:59:2

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Definitions/Qualifiers

Project: 20152575

Value	Description
N	See narrative for a detailed explanation.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Chain of Custody

www.pacelabs.com

Workorder: 10224382 **Workorder Name:** OLD LANDFILL **Owner Received Date:** 4/4/2013 **Results Requested By:** 4/17/2013

Report To	Subcontract To
Julie Thieschafer Pace Analytical Services, Inc. 1700 Elm Street, Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Fax (612)607-6444	Pace Analytical New Orleans 1000 Riverbend Blvd Suite F St. Rose, LA 70087 Phone (504)469-0333

						Preserved Containers						Requested Analysis												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved						8151*	8081*	8270*										LAB USE ONLY
1	BSB-GW-01	PS	4/2/2013 10:25	10224382001	Water	4						X	X	X										201079478
2	BSB-GW-02	PS	4/2/2013 13:22	10224382002	Water	5						X	X	X										" 9479
3	BSB-GW-03	PS	4/2/2013 14:15	10224382003	Water	4						X	X	X										" 9480
4	BSB-GW-04	PS	4/2/2013 16:10	10224382004	Water	5						X	X	X										" 9481
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	Pace-MN	4/4/13 14:56		
2	FedEx	4-5-13 1010	J miller	4-5-13
3				

Comments

*same lists as WO# 20136877

1010

Cooler Temperature on Receipt 1.1 °C 1.3 1.5	Custody Seal [✓ Y] or N	Received on Ice [✓ Y] or N	Samples Intact [✓ Y] or N

Pace Analytical

Sample Con

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

20152575 PASI-MINN

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☒Yes ☐No

Therometer Used:
☐ Therm Fisher IR 5
☐ Therm Fisher IR 6
☒ Therm Fisher IR 7

Type of ice: [✓ Wet] Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and initials of person examining contents: 04-06-13

Temp must be measured from Temperature blank when present

Comments:

Temperature Blank Present"?	☒Yes	☐No	☐N/A	1
Chain of Custody Present:	☒Yes	☐No	☐N/A	2
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6
Sufficient Volume:	☒Yes	☐No	☐N/A	7
Correct Containers Used:	☒Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9
Sample Labels match COC:	☒Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☒N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	13 If No, was preservative added? ☐Yes ☐No If added record lot no.: HNO3 ______ H2SO4 ______
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	14
Trip Blank Present:	☐Yes	☒No		15

Client Notification/ Resolution:

Person Contacted: ______________________ Date/Time: ____________

Comments/ Resolution: ______________________

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Chains of Custody

Chain of Custody

www.pacelabs.com

Workorder: 10224382 **Workorder Name:** OLD LANDFILL **Owner Received Date:** 4/4/2013 **Results Requested By:** 4/17/2013

Report To	**Subcontract To**
Julie Thieschafer Pace Analytical Services, Inc. 1700 Elm Street, Suite 200 Minneapolis, MN 55414 Phone (612)607-1700 Fax (612)607-6444	Pace Analytical New Orleans 1000 Riverbend Blvd Suite F St. Rose, LA 70087 Phone (504)469-0333

						Preserved Containers						Requested Analysis												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved						8151*	8081*	8270*										LAB USE ONLY
1	BSB-GW-01	PS	4/2/2013 10:25	10224382001	Water	4						X	X	X										20107 9478
2	BSB-GW-02	PS	4/2/2013 13:22	10224382002	Water	5						X	X	X										" 9479
3	BSB-GW-03	PS	4/2/2013 14:15	10224382003	Water	4						X	X	X										" 9480
4	BSB-GW-04	PS	4/2/2013 16:10	10224382004	Water	5						X	X	X										" 9481
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	Pace-MN	4/4/13 14:56		
2	FedEx	4-5-13 1010	J miller	4-5-13 1010
3				

Comments

*same lists as wo# 20136877

Cooler Temperature on Receipt 1.1 °C
1.3
1.5

Custody Seal [✓ Y] or N **Received on Ice** [✓ Y] or N **Samples Intact** [✓ Y] or N

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Co

20152575 PASI-MINN

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals intact: ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☒ Therm Fisher IR 7

Type of Ice: [✓ Wet] Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 04-06-13

Temp must be measured from Temperature blank when present

Comments:

Temperature Blank Present"?	☑Yes	☐No	☐N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☒Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☒N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	13 If No, was preservative added? ☐Yes ☐No If added record lot no.: HNO3 ______ H2SO4 ______
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	14
Trip Blank Present:	☐Yes	☒No		15

Client Notification/ Resolution:

Person Contacted: ____________________ Date/Time: __________

Comments/ Resolution: ____________________

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10224382

Page: 1 of 1

Section A
Required Client Information:
Company: Pioneer Technical
Address: 40 Spanish Peak Dr.
Bozeman, MT 59718
Email To: jemmert@pioneer-techinical.com
Phone: 406-782-5177 Fax:
Requested Due Date/TAT: Standard

Section B
Required Project Information:
Report To: J.D. Emmert
Copy To:
Purchase Order No.:
Project Name: OLD LANDFILL
Project Number:

Section C
Invoice Information:
Attention: Gary Keeler (406-497-6515)
Company Name: BSB Public Works Dept
Address: 126 W. Granite Butte,MT 59701
Pace Quote Reference:
Pace Project Manager: Julie Thieschafer
Pace Profile #: 21705

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MT

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

COLLECTED: GRAB ~~COMPOSITE START~~ / ~~COMPOSITE END/GRAB~~

Requested Analysis Filtered (Y/N): Dissolved Metals Y

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test	Cyanide	Nitrate+Nitrite	COD	8270	8151	8260	Dissolved Metals	8081	8082	Sulfide	8011		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BSB-GW-01	WT	G	4/2/13	1025				17	x	x	x	x	x					x	x	x	x	x	x	x	x	x	x				001
2	BSB-GW-02	WT	G	4/2/13	1322				16	x	x		x	x					x	x	x	x	x	x		x	x	x				002
3	BSB-GW-03	WT	G	4/2/13	1415				16	x	x		x	x					x	x	x	x	x	x		x	x	x				003
4	BSB-GW-04	WT	G	4/2/13	1610				16	x	x		x	x					x	x	x	x	x	x		x	x	x				004
5	BSB-GW-07	WT	G	4/2/13	1610				3				x											x								005
6	TRIP BLANK	WT	G	~~4/2/13~~	~~1410~~				2				x											x								1 set of 2 Broken ~~006~~
7																																upon Cooler Arrival
8																																only Mailed Back
9																																1 Set of trip Blanks.
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
8151 subbed to NOLA and FL	DJ Renz / PTS	4/3/13	1500	TN / Pace	4/4/13	914	4.3			
8270, 8081 and 8260 subbed to NOLA							4.7			
Sulfide subbed to GB							4.1			
Cyanide and 8011 subbed to KS				2.3, 1.7,	4.2,	3.9,	5.2			
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: DJ Renz
SIGNATURE of SAMPLER: DJ Renz
DATE Signed (MM/DD/YY): 04/03/2013

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

1024392

SAMPLE ID

1 Set of 2 [illegible]
[illegible]
[illegible]
[illegible]

[illegible]	[illegible]	0956	T/N/A	[illegible]	4.3		
					4.7		
					4.4		
			23.1/7	4.2	3.4	6.2	

Pace Analytical®	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: F-MN-L-213-rev.06	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Pioneer

Project #:

WO#: 10224382

10224382

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: See exception sheet

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermom. Used: ☐ B88A912167504 ☐ 80512447 ☒ 72337080 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): See exception **Cooler Temp Corrected (°C):** See exceptions **Biological Tissue Frozen?** ☐ Yes ☐ No

Temp should be above freezing to 6°C **Correction Factor:** +.8 **Date and Initials of Person Examining Contents:** 4 4 13 TN

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☐ Yes	☒ No	☐ N/A	10. See exceptions sheet
Filtered Volume Received for Dissolved Tests?	☒ Yes	☐ No	☐ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☒ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☒ Yes	☐ No	☐ N/A	13. ☒ HNO_3 ☒ H_2SO_4 ☒ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☒ Yes	☐ No	☐ N/A	Sample # -01 TN 4413 ~~-02 -04~~ All ✓ ✓ ✓ All
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	☒ Yes	☐ No		Initial when completed: TN Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☒ No	☐ N/A	14.
Trip Blank Present?	☒ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☒ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): 030513-1				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Julie F. Date/Time: 4/4/13.

Comments/Resolution: Let Julie Flammang know about broken containers

Project Manager Review: **Date:** 4/4/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical	Document Name: **SCUR Exceptions Form**	Document Revised: 16Apr2012 Page 1 of 1
	Document No.: **F-MN-L-220-Rev.00**	Issuing Authority: Pace Minnesota Quality Office

Workorder #: Pioneer

Issue	Sample ID	Container Type/#
8690 6816 2723	3.5 4.3	
8019 3766 0046	3.9 4.7	
" 0079	3.3 4.1	
" 0080	4.4 5.2	
0068	3.1 3.9	
8690 6816 2712	3.4 4.2	
8019 3766 0090	0.9 1.7	
" 0057	1.5 2.3	
-01	1AG1U Broken	
-03	1AG1U Broken	
-04	1 VG9H Broken	

Jb7

4079885

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 10224382 **Workorder Name:** OLD LANDFILL **Owner Received Date:** 4/4/2013 **Results Requested By:** 4/17/2013

Report To

Julie Thieschafer
Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone (612)607-1700
Fax (612)607-6444

Subcontract To

Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302
Phone (920)469-2436

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	Requested Analysis: Sulfide	LAB USE ONLY
1	BSB-GW-01 001	PS	4/2/2013 10:25	10224382001	Water	1	X	1-500ml, pl
2	BSB-GW-02 002	PS	4/2/2013 13:22	10224382002	Water	1	X	
3	BSB-GW-03 003	PS	4/2/2013 14:15	10224382003	Water	1	X	
4	BSB-GW-04 004	PS	4/2/2013 16:10	10224382004	Water	1	X	
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	PaceMN	4/4/13 14:50		
2	Waltco	4/5/13 0810	E Alding Pace GB	4/5/13 0810
3				

Comments

Cooler Temperature on Receipt 5 °C Custody Seal [✓ Y] or N Received on Ice [✓ Y] or N Samples Intact [✓ Y] or N

Pace Analytical™

Pace Analytical Services, In
1241 Bellevue Street, Suite
Green Bay, WI 5430

Sample Condition Upon Receipt

Client Name: Pace MN **Project #** 4075885

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other Walfco

Tracking #: 322394

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used SR25 **Type of Ice:** [✓ Wet] Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 5 /Corr: 5 **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☑ yes ☐ no

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 4/5/13
Initials: EMH

				Comments:
Chain of Custody Present:	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out:	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished:	☑ Yes	☐ No	☐ N/A	3.
Sampler Name & Signature on COC:	☐ Yes	☐ No	☑ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No	☐ N/A	5.
- VOA Samples frozen upon receipt	☐ Yes	☐ No		Date/Time:
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No	☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume:	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used:	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used:	☐ Yes	☑ No	☐ N/A	
-Pace IR Containers Used:	☑ Yes	☐ No	☐ N/A	
Containers Intact:	☑ Yes	☐ No	☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11.
Sample Labels match COC:	☑ Yes	☐ No	☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: W				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑ Yes	☐ No	☐ N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☑ NaOH +ZnAct All except 004 pH ≥10 004 pH=7 EMH 4/5/13
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐ Yes	☑ No	☐ N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐ Yes	☐ No		Initial when completed EMH Lab Std #ID of preservative Date/ Time:
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☑ N/A	14.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	15.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: **Date:** 4/5/13

F-GB-C-031-Rev.01 (01Mar2013) SCUR Form

WO#: 3588754

3588754

Chain of Custody —

Pace Analytical®
www.pacelabs.com

Workorder: 10224382 **Workorder Name:** OLD LANDFILL **Owner Received Date:** 4/4/2013 **Results Requested By:** 4/17/2013

Report To

Julie Thieschafer
Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone (612)607-1700
Fax (612)607-6444

Subcontract To

Pace Analytical Ormond Beach
8 East Tower Circle
Ormond Beach, FL 32174
Phone (386)672-5668

						Preserved Containers						Requested Analysis												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved						8151												LAB USE ONLY
1	BSB-GW-01	PS	4/2/2013 10:25	10224382001	Water	2						X												
2	BSB-GW-02	PS	4/2/2013 13:22	10224382002	Water	2						X												
3	BSB-GW-03	PS	4/2/2013 14:15	10224382003	Water	2						X												
4	BSB-GW-04	PS	4/2/2013 16:10	10224382004	Water	2						X												
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1		4/4/13 14:45		4/5 1145
2				
3				

Comments

*list attached

Cooler Temperature on Receipt 1.8 °C
7I12

Custody Seal Y or N

Received on Ice Y or N

Samples Intact Y or N

Thursday, April 04, 2013 2:41:03 PM

FMT-ALL-C-002rev.00 24March2009

Page 1 of 1

ANALYTICAL RESULTS

Project: OLD LANDFILL
Pace Project No.: 10169563

Sample: BSB-GW-01 Lab ID: **10169563001** Collected: 09/12/11 12:25 Received: 09/15/11 10:00 Matrix: Water

Floridas list

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8151 Chlorinated Herbicides	Analytical Method: EPA 8151								
Bentazon	ND	ug/L	0.096	0.016	1	09/19/11 14:00	09/28/11 23:15	25057-89-0	
2,4-D	ND	ug/L	0.96	0.23	1	09/19/11 14:00	09/28/11 23:15	94-75-7	
Dalapon	ND	ug/L	0.93	0.44	1	09/19/11 14:00	09/28/11 23:15	127-20-8	
2,4-DB	ND	ug/L	1.9	0.52	1	09/19/11 14:00	09/28/11 23:15	94-82-6	
Dicamba	ND	ug/L	0.096	0.031	1	09/19/11 14:00	09/28/11 23:15	1918-00-9	
Dichlorprop	ND	ug/L	0.67	0.19	1	09/19/11 14:00	09/28/11 23:15	120-36-5	
Dinoseb	ND	ug/L	0.19	0.058	1	09/19/11 14:00	09/28/11 23:15	88-85-7	
Pentachlorophenol	ND	ug/L	0.029	0.017	1	09/19/11 14:00	09/28/11 23:15	87-86-5	
Picloram	ND	ug/L	0.096	0.019	1	09/19/11 14:00	09/28/11 23:15	1918-02-1	
2,4,5-T	ND	ug/L	0.19	0.043	1	09/19/11 14:00	09/28/11 23:15	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	0.19	0.050	1	09/19/11 14:00	09/28/11 23:15	93-72-1	
2,4-DCPA (S)	84	%	65.5-125.7		1	09/19/11 14:00	09/28/11 23:15	19719-28-9	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony, Dissolved	**0.000069J**	mg/L	0.00050	0.000070	1	09/20/11 15:19	09/23/11 13:03	7440-36-0	
Arsenic, Dissolved	**0.0013**	mg/L	0.00050	0.000090	1	09/20/11 15:19	09/23/11 13:03	7440-38-2	
Barium, Dissolved	**0.15**	mg/L	0.00030	0.000080	1	09/20/11 15:19	09/23/11 13:03	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.00020	0.000020	1	09/20/11 15:19	09/23/11 13:03	7440-41-7	
Cadmium, Dissolved	ND	mg/L	0.000080	0.000030	1	09/20/11 15:19	09/23/11 13:03	7440-43-9	
Chromium, Dissolved	**0.00037J**	mg/L	0.00050	0.00010	1	09/20/11 15:19	09/23/11 13:03	7440-47-3	
Cobalt, Dissolved	ND	mg/L	0.00050	0.00025	1	09/20/11 15:19	09/23/11 13:03	7440-48-4	
Copper, Dissolved	**0.0011**	mg/L	0.00050	0.000070	1	09/20/11 15:19	09/23/11 13:03	7440-50-8	
Iron, Dissolved	**0.44**	mg/L	0.050	0.0047	1	09/20/11 15:19	09/23/11 13:03	7439-89-6	
Lead, Dissolved	ND	mg/L	0.00010	0.000050	1	09/20/11 15:19	09/23/11 13:03	7439-92-1	
Nickel, Dissolved	**0.00013J**	mg/L	0.00050	0.000070	1	09/20/11 15:19	09/23/11 13:03	7440-02-0	
Selenium, Dissolved	**0.00066**	mg/L	0.00050	0.00022	1	09/20/11 15:19	09/23/11 13:03	7782-49-2	
Silver, Dissolved	ND	mg/L	0.00050	0.000070	1	09/20/11 15:19	09/23/11 13:03	7440-22-4	
Thallium, Dissolved	ND	mg/L	0.00010	0.000050	1	09/20/11 15:19	09/23/11 13:03	7440-28-0	
Vanadium, Dissolved	**0.0072**	mg/L	0.00010	0.000050	1	09/20/11 15:19	09/23/11 13:03	7440-62-2	
Zinc, Dissolved	**0.0032J**	mg/L	0.0050	0.0025	1	09/20/11 15:19	09/23/11 13:03	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1								
Mercury, Dissolved	ND	mg/L	0.00020	0.000037	1	09/23/11 20:54	09/28/11 14:39	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	12.5	1		09/22/11 16:07	67-64-1	
Acetonitrile	ND	ug/L	40.0	20.0	1		09/22/11 16:07	75-05-8	
Benzene	ND	ug/L	1.0	0.36	1		09/22/11 16:07	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.22	1		09/22/11 16:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.23	1		09/22/11 16:07	75-27-4	
Bromoform	ND	ug/L	4.0	2.0	1		09/22/11 16:07	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		09/22/11 16:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	4.0	2.0	1		09/22/11 16:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	0.21	1		09/22/11 16:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.38	1		09/22/11 16:07	56-23-5	

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: September 23, 2011
	Document No.: F-FL-C-007 rev. 04	Issuing Authorities: Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Table Number:______

Client Name: PACE 10 Project # 3588754

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other______

Tracking # 5540 9196 6636

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals Intact ☐ yes ☐ no

Date and Initials of person examining contents: 4/5/13 SM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other______

Thermometer Used 7712 Type of Ice: [✓ Wet] Blue None

Cooler Temperature°C 2.3 (Visual) -0.5 (Correction Factor) 1.8 (Actual)

(Temp should be above freezing to 6°C). If below 0°C, then was sample frozen? ☐ Yes ☐ No

Receipt of samples satisfactory: ☐ Yes ☐ No

Rush TAT requested on COC:

If yes, then all conditions below were met:	If no, then mark box & describe issue (use comments area if necessary):
Chain of Custody Present	☐
Chain of Custody Filled Out	☐
Relinquished Signature & Sampler Name COC	☐
Samples Arrived within Hold Time	☐
Sufficient Volume	☐
Correct Containers Used	☐
Containers Intact	☐
Sample Labels match COC (sample IDs & date/time of collection)	☐ No Labels: ☐ No Time/Date on Labels: ☐
All containers needing preservation are found to be in compliance with EPA recommendation.	☐
No Headspace in VOA Vials (>6mm):	☐

Client Notification/ Resolution:

Person Contacted: ______ Date/Time: ______

Comments/ Resolution (use back for additional comments): ______

Project Manager Review: ______ Date:______

Finished Product Information Only

F.P. Sample ID:______

Production Code:______

Date/Time Opened:______

Number of Unopened Bottles Remaining:______

Extra Sample in Shed: Yes No

Size & Qty of Bottles Received

______ x 5 Gal
______ x 2.5 Gal
______ x 1 Gal
______ x 1 Liter
______ x 500 mL
______ x 250 mL
______ x Other:______

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

April 17, 2013

JD Emmert
Pioneer Technical Services
40 Spanish Peak Drive
Suite 101
Bozeman, MT 59718

RE: Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Dear JD Emmert:
Enclosed are the analytical results for sample(s) received by the laboratory on April 04, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Julie Thieschafer

julie.thieschafer@pacelabs.com
Project Manager

Enclosures

CERTIFICATIONS

Project:	Old Landfill/Clark Tailings
Pace Project No.:	10224408

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

SAMPLE SUMMARY

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10224408001	**BSB-GW-05**	Water	04/03/13 09:48	04/04/13 09:14
10224408002	**BSB-GW-06**	Water	04/03/13 11:22	04/04/13 09:14
10224408003	**BSB-GW-08**	Water	04/03/13 11:22	04/04/13 09:14
10224408004	**BSB-GW-09**	Water	04/03/13 14:10	04/04/13 09:14

SAMPLE ANALYTE COUNT

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10224408001	**BSB-GW-05**	EPA 200.8	TT3	16	PASI-M
		EPA 120.1	KK1	1	PASI-M
		SM 4500-H+B	RLB	1	PASI-M
		ASTM D516-02	KEO	1	PASI-M
		SM 4500-Cl E	KEO	1	PASI-M
10224408002	**BSB-GW-06**	EPA 200.8	TT3	16	PASI-M
		EPA 120.1	KK1	1	PASI-M
		SM 4500-H+B	RLB	1	PASI-M
		ASTM D516-02	KEO	1	PASI-M
		SM 4500-Cl E	KEO	1	PASI-M
10224408003	**BSB-GW-08**	EPA 200.8	TT3	16	PASI-M
		EPA 120.1	KK1	1	PASI-M
		SM 4500-H+B	RLB	1	PASI-M
		ASTM D516-02	KEO	1	PASI-M
		SM 4500-Cl E	KEO	1	PASI-M
10224408004	**BSB-GW-09**	EPA 200.8	TT3	16	PASI-M
		EPA 120.1	KK1	1	PASI-M
		SM 4500-H+B	RLB	1	PASI-M
		ASTM D516-02	KEO	1	PASI-M
		SM 4500-Cl E	KEO	1	PASI-M

PROJECT NARRATIVE

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Method: **EPA 200.8**
Description: 200.8 MET ICPMS, Dissolved
Client: BPAR-PIONEER-MT
Date: April 17, 2013

General Information:
4 samples were analyzed for EPA 200.8. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 200.8 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Method: **EPA 120.1**
Description: 120.1 Specific Conductance
Client: BPAR-PIONEER-MT
Date: April 17, 2013

General Information:
4 samples were analyzed for EPA 120.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: BPAR-PIONEER-MT
Date: April 17, 2013

General Information:
4 samples were analyzed for SM 4500-H+B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.

- BSB-GW-05 (Lab ID: 10224408001)
- BSB-GW-06 (Lab ID: 10224408002)
- BSB-GW-08 (Lab ID: 10224408003)
- BSB-GW-09 (Lab ID: 10224408004)

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Method: **ASTM D516-02**
Description: ASTM D516-90 Sulfate Water
Client: BPAR-PIONEER-MT
Date: April 17, 2013

General Information:
4 samples were analyzed for ASTM D516-02. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/14533

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10224396008,10224408001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 1404350)
  - Sulfate

Additional Comments:

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project:	Old Landfill/Clark Tailings
Pace Project No.:	10224408

Method: **SM 4500-Cl E**
Description: SM4500Cl-E Chloride
Client: BPAR-PIONEER-MT
Date: April 17, 2013

General Information:
4 samples were analyzed for SM 4500-Cl E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/14535

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10224408001,10224469007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1404413)
  - Chloride
- MSD (Lab ID: 1404414)
  - Chloride

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Sample: BSB-GW-05 **Lab ID: 10224408001** Collected: 04/03/13 09:48 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony, Dissolved	**0.00016J**	mg/L	0.00050	0.000056	1	04/07/13 08:54	04/08/13 12:15	7440-36-0	
Arsenic, Dissolved	**0.12**	mg/L	0.00050	0.000093	1	04/07/13 08:54	04/08/13 12:15	7440-38-2	
Barium, Dissolved	**0.025**	mg/L	0.00030	0.00014	1	04/07/13 08:54	04/08/13 12:15	7440-39-3	
Beryllium, Dissolved	**0.00038**	mg/L	0.00020	0.000053	1	04/07/13 08:54	04/08/13 12:15	7440-41-7	
Cadmium, Dissolved	**0.016**	mg/L	0.000080	0.000032	1	04/07/13 08:54	04/08/13 12:15	7440-43-9	
Chromium, Dissolved	**0.00046J**	mg/L	0.00050	0.000081	1	04/07/13 08:54	04/08/13 12:15	7440-47-3	
Cobalt, Dissolved	**0.050**	mg/L	0.00050	0.000052	1	04/07/13 08:54	04/08/13 12:15	7440-48-4	
Copper, Dissolved	**0.00050**	mg/L	0.00050	0.00017	1	04/07/13 08:54	04/08/13 12:15	7440-50-8	
Iron, Dissolved	**17.4**	mg/L	0.050	0.0059	1	04/07/13 08:54	04/08/13 12:15	7439-89-6	
Lead, Dissolved	ND	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:15	7439-92-1	
Nickel, Dissolved	**0.044**	mg/L	0.00050	0.00015	1	04/07/13 08:54	04/08/13 12:15	7440-02-0	
Selenium, Dissolved	ND	mg/L	0.00050	0.00012	1	04/07/13 08:54	04/08/13 12:15	7782-49-2	
Silver, Dissolved	ND	mg/L	0.00050	0.000050	1	04/07/13 08:54	04/08/13 12:15	7440-22-4	
Thallium, Dissolved	**0.000037J**	mg/L	0.00010	0.000025	1	04/07/13 08:54	04/08/13 12:15	7440-28-0	B
Vanadium, Dissolved	**0.00036**	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:15	7440-62-2	
Zinc, Dissolved	**61.2**	mg/L	1.0	0.20	200	04/07/13 08:54	04/08/13 12:19	7440-66-6	
120.1 Specific Conductance	Analytical Method: EPA 120.1								
Specific Conductance	**1870**	umhos/cm	1.0	0.50	1		04/12/13 13:58		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.0**	Std. Units	0.10	0.050	1		04/09/13 10:12		H6
ASTM D516-90 Sulfate Water	Analytical Method: ASTM D516-02								
Sulfate	**1050**	mg/L	125	62.5	50		04/05/13 09:21	14808-79-8	M6
SM4500Cl-E Chloride	Analytical Method: SM 4500-Cl E								
Chloride	**30.7**	mg/L	2.0	1.0	1		04/05/13 11:05	16887-00-6	

ANALYTICAL RESULTS

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Sample: BSB-GW-06 **Lab ID: 10224408002** Collected: 04/03/13 11:22 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony, Dissolved	**0.000082J**	mg/L	0.00050	0.000056	1	04/07/13 08:54	04/08/13 12:24	7440-36-0	
Arsenic, Dissolved	**0.00091**	mg/L	0.00050	0.000093	1	04/07/13 08:54	04/08/13 12:24	7440-38-2	
Barium, Dissolved	**0.018**	mg/L	0.00030	0.00014	1	04/07/13 08:54	04/08/13 12:24	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.00020	0.000053	1	04/07/13 08:54	04/08/13 12:24	7440-41-7	
Cadmium, Dissolved	**0.00062**	mg/L	0.000080	0.000032	1	04/07/13 08:54	04/08/13 12:24	7440-43-9	
Chromium, Dissolved	**0.00088**	mg/L	0.00050	0.000081	1	04/07/13 08:54	04/08/13 12:24	7440-47-3	
Cobalt, Dissolved	**0.00078**	mg/L	0.00050	0.000052	1	04/07/13 08:54	04/08/13 12:24	7440-48-4	
Copper, Dissolved	**0.0019**	mg/L	0.00050	0.00017	1	04/07/13 08:54	04/08/13 12:24	7440-50-8	
Iron, Dissolved	ND	mg/L	0.050	0.0059	1	04/07/13 08:54	04/08/13 12:24	7439-89-6	
Lead, Dissolved	ND	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:24	7439-92-1	
Nickel, Dissolved	**0.015**	mg/L	0.00050	0.00015	1	04/07/13 08:54	04/08/13 12:24	7440-02-0	
Selenium, Dissolved	**0.00013J**	mg/L	0.00050	0.00012	1	04/07/13 08:54	04/08/13 12:24	7782-49-2	
Silver, Dissolved	ND	mg/L	0.00050	0.000050	1	04/07/13 08:54	04/08/13 12:24	7440-22-4	
Thallium, Dissolved	ND	mg/L	0.00010	0.000025	1	04/07/13 08:54	04/08/13 12:24	7440-28-0	
Vanadium, Dissolved	**0.0020**	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:24	7440-62-2	
Zinc, Dissolved	**0.27**	mg/L	0.0050	0.00098	1	04/07/13 08:54	04/08/13 12:24	7440-66-6	
120.1 Specific Conductance	Analytical Method: EPA 120.1								
Specific Conductance	**1730**	umhos/cm	1.0	0.50	1		04/12/13 13:59		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.3**	Std. Units	0.10	0.050	1		04/09/13 10:14		H6
ASTM D516-90 Sulfate Water	Analytical Method: ASTM D516-02								
Sulfate	**885**	mg/L	125	62.5	50		04/05/13 09:24	14808-79-8	
SM4500Cl-E Chloride	Analytical Method: SM 4500-Cl E								
Chloride	**48.3**	mg/L	2.0	1.0	1		04/05/13 11:05	16887-00-6	

ANALYTICAL RESULTS

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Sample: BSB-GW-08 **Lab ID: 10224408003** Collected: 04/03/13 11:22 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony, Dissolved	ND	mg/L	0.00050	0.000056	1	04/07/13 08:54	04/08/13 12:28	7440-36-0	
Arsenic, Dissolved	**0.0010**	mg/L	0.00050	0.000093	1	04/07/13 08:54	04/08/13 12:28	7440-38-2	
Barium, Dissolved	**0.017**	mg/L	0.00030	0.00014	1	04/07/13 08:54	04/08/13 12:28	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.00020	0.000053	1	04/07/13 08:54	04/08/13 12:28	7440-41-7	
Cadmium, Dissolved	**0.00050**	mg/L	0.000080	0.000032	1	04/07/13 08:54	04/08/13 12:28	7440-43-9	
Chromium, Dissolved	**0.00086**	mg/L	0.00050	0.000081	1	04/07/13 08:54	04/08/13 12:28	7440-47-3	
Cobalt, Dissolved	**0.00035J**	mg/L	0.00050	0.000052	1	04/07/13 08:54	04/08/13 12:28	7440-48-4	
Copper, Dissolved	**0.0018**	mg/L	0.00050	0.00017	1	04/07/13 08:54	04/08/13 12:28	7440-50-8	
Iron, Dissolved	ND	mg/L	0.050	0.0059	1	04/07/13 08:54	04/08/13 12:28	7439-89-6	
Lead, Dissolved	ND	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:28	7439-92-1	
Nickel, Dissolved	**0.014**	mg/L	0.00050	0.00015	1	04/07/13 08:54	04/08/13 12:28	7440-02-0	
Selenium, Dissolved	**0.00031J**	mg/L	0.00050	0.00012	1	04/07/13 08:54	04/08/13 12:28	7782-49-2	
Silver, Dissolved	ND	mg/L	0.00050	0.000050	1	04/07/13 08:54	04/08/13 12:28	7440-22-4	
Thallium, Dissolved	ND	mg/L	0.00010	0.000025	1	04/07/13 08:54	04/08/13 12:28	7440-28-0	
Vanadium, Dissolved	**0.0019**	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:28	7440-62-2	
Zinc, Dissolved	**0.25**	mg/L	0.0050	0.00098	1	04/07/13 08:54	04/08/13 12:28	7440-66-6	
120.1 Specific Conductance	Analytical Method: EPA 120.1								
Specific Conductance	**1720**	umhos/cm	1.0	0.50	1		04/12/13 14:00		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.3**	Std. Units	0.10	0.050	1		04/09/13 10:15		H6
ASTM D516-90 Sulfate Water	Analytical Method: ASTM D516-02								
Sulfate	**845**	mg/L	125	62.5	50		04/05/13 09:26	14808-79-8	
SM4500Cl-E Chloride	Analytical Method: SM 4500-Cl E								
Chloride	**48.4**	mg/L	2.0	1.0	1		04/05/13 11:05	16887-00-6	

ANALYTICAL RESULTS

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Sample: BSB-GW-09 **Lab ID: 10224408004** Collected: 04/03/13 14:10 Received: 04/04/13 09:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Antimony, Dissolved	ND	mg/L	0.00050	0.000056	1	04/07/13 08:54	04/08/13 12:33	7440-36-0	
Arsenic, Dissolved	**0.00015J**	mg/L	0.00050	0.000093	1	04/07/13 08:54	04/08/13 12:33	7440-38-2	
Barium, Dissolved	ND	mg/L	0.00030	0.00014	1	04/07/13 08:54	04/08/13 12:33	7440-39-3	
Beryllium, Dissolved	ND	mg/L	0.00020	0.000053	1	04/07/13 08:54	04/08/13 12:33	7440-41-7	
Cadmium, Dissolved	ND	mg/L	0.000080	0.000032	1	04/07/13 08:54	04/08/13 12:33	7440-43-9	
Chromium, Dissolved	**0.00011J**	mg/L	0.00050	0.000081	1	04/07/13 08:54	04/08/13 12:33	7440-47-3	
Cobalt, Dissolved	ND	mg/L	0.00050	0.000052	1	04/07/13 08:54	04/08/13 12:33	7440-48-4	
Copper, Dissolved	**0.00052**	mg/L	0.00050	0.00017	1	04/07/13 08:54	04/08/13 12:33	7440-50-8	
Iron, Dissolved	ND	mg/L	0.050	0.0059	1	04/07/13 08:54	04/08/13 12:33	7439-89-6	
Lead, Dissolved	**0.000080J**	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:33	7439-92-1	
Nickel, Dissolved	ND	mg/L	0.00050	0.00015	1	04/07/13 08:54	04/08/13 12:33	7440-02-0	
Selenium, Dissolved	ND	mg/L	0.00050	0.00012	1	04/07/13 08:54	04/08/13 12:33	7782-49-2	
Silver, Dissolved	ND	mg/L	0.00050	0.000050	1	04/07/13 08:54	04/08/13 12:33	7440-22-4	
Thallium, Dissolved	ND	mg/L	0.00010	0.000025	1	04/07/13 08:54	04/08/13 12:33	7440-28-0	
Vanadium, Dissolved	ND	mg/L	0.00010	0.000046	1	04/07/13 08:54	04/08/13 12:33	7440-62-2	
Zinc, Dissolved	**0.0027J**	mg/L	0.0050	0.00098	1	04/07/13 08:54	04/08/13 12:33	7440-66-6	
120.1 Specific Conductance	Analytical Method: EPA 120.1								
Specific Conductance	**3.0**	umhos/cm	1.0	0.50	1		04/12/13 14:01		B
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.050	1		04/09/13 10:16		H6
ASTM D516-90 Sulfate Water	Analytical Method: ASTM D516-02								
Sulfate	ND	mg/L	2.5	1.2	1		04/05/13 09:00	14808-79-8	
SM4500Cl-E Chloride	Analytical Method: SM 4500-Cl E								
Chloride	ND	mg/L	2.0	1.0	1		04/05/13 11:05	16887-00-6	

QUALITY CONTROL DATA

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

QC Batch: MPRP/38392 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET Dissolved
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

METHOD BLANK: 1404913 Matrix: Water
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Arsenic, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Barium, Dissolved	mg/L	ND	0.00030	04/08/13 11:18	
Beryllium, Dissolved	mg/L	ND	0.00020	04/08/13 11:18	
Cadmium, Dissolved	mg/L	ND	0.000080	04/08/13 11:18	
Chromium, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Cobalt, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Copper, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Iron, Dissolved	mg/L	ND	0.050	04/08/13 11:18	
Lead, Dissolved	mg/L	ND	0.00010	04/08/13 11:18	
Nickel, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Selenium, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Silver, Dissolved	mg/L	ND	0.00050	04/08/13 11:18	
Thallium, Dissolved	mg/L	0.000027J	0.00010	04/08/13 11:18	
Vanadium, Dissolved	mg/L	ND	0.00010	04/08/13 11:18	
Zinc, Dissolved	mg/L	ND	0.0050	04/08/13 11:18	

LABORATORY CONTROL SAMPLE: 1404914

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	.08	0.079	98	85-115	
Arsenic, Dissolved	mg/L	.08	0.078	98	85-115	
Barium, Dissolved	mg/L	.08	0.080	100	85-115	
Beryllium, Dissolved	mg/L	.08	0.080	99	85-115	
Cadmium, Dissolved	mg/L	.08	0.080	101	85-115	
Chromium, Dissolved	mg/L	.08	0.080	100	85-115	
Cobalt, Dissolved	mg/L	.08	0.080	99	85-115	
Copper, Dissolved	mg/L	.08	0.083	103	85-115	
Iron, Dissolved	mg/L	1	0.99	99	85-115	
Lead, Dissolved	mg/L	.08	0.079	99	85-115	
Nickel, Dissolved	mg/L	.08	0.081	101	85-115	
Selenium, Dissolved	mg/L	.08	0.079	98	85-115	
Silver, Dissolved	mg/L	.08	0.073	91	85-115	
Thallium, Dissolved	mg/L	.08	0.077	97	85-115	
Vanadium, Dissolved	mg/L	.08	0.080	100	85-115	
Zinc, Dissolved	mg/L	.08	0.078	98	85-115	

QUALITY CONTROL DATA

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1404915 1404916

Parameter	Units	10224382001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony, Dissolved	mg/L	0.00013J	.08	.08	0.079	0.079	99	99	70-130	.1	20	
Arsenic, Dissolved	mg/L	0.0011	.08	.08	0.080	0.080	99	98	70-130	.4	20	
Barium, Dissolved	mg/L	0.13	.08	.08	0.21	0.21	99	100	70-130	.5	20	
Beryllium, Dissolved	mg/L	ND	.08	.08	0.083	0.080	104	100	70-130	3	20	
Cadmium, Dissolved	mg/L	ND	.08	.08	0.078	0.082	97	103	70-130	6	20	
Chromium, Dissolved	mg/L	0.0016	.08	.08	0.079	0.081	97	100	70-130	3	20	
Cobalt, Dissolved	mg/L	0.00079	.08	.08	0.078	0.076	96	94	70-130	2	20	
Copper, Dissolved	mg/L	0.0038	.08	.08	0.082	0.082	98	98	70-130	.06	20	
Iron, Dissolved	mg/L	ND	1	1	0.99	1.0	99	102	70-130	3	20	
Lead, Dissolved	mg/L	0.000063J	.08	.08	0.079	0.079	98	99	70-130	.8	20	
Nickel, Dissolved	mg/L	0.00027J	.08	.08	0.080	0.078	99	97	70-130	2	20	
Selenium, Dissolved	mg/L	0.00095	.08	.08	0.079	0.076	97	94	70-130	3	20	
Silver, Dissolved	mg/L	0.000058J	.08	.08	0.063	0.070	79	88	70-130	11	20	
Thallium, Dissolved	mg/L	ND	.08	.08	0.077	0.081	96	101	70-130	5	20	
Vanadium, Dissolved	mg/L	0.0067	.08	.08	0.087	0.087	100	101	70-130	.6	20	
Zinc, Dissolved	mg/L	0.0015J	.08	.08	0.080	0.080	98	98	70-130	.3	20	

QUALITY CONTROL DATA

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

QC Batch: WET/29896
QC Batch Method: EPA 120.1
Analysis Method: EPA 120.1
Analysis Description: 120.1 Specific Conductance
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

METHOD BLANK: 1408115
Matrix: Water
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	0.91J	1.0	04/12/13 13:53	

LABORATORY CONTROL SAMPLE: 1408116

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance	umhos/cm	1000	986	99	90-110	

SAMPLE DUPLICATE: 1408117

Parameter	Units	10224274005 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	278	280	.7	20	

SAMPLE DUPLICATE: 1408118

Parameter	Units	10224575001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	901	904	.3	20	

QUALITY CONTROL DATA

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

QC Batch: WET/29846
Analysis Method: SM 4500-H+B
QC Batch Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

LABORATORY CONTROL SAMPLE: 1405613

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	4.9	98	98-102	H6

SAMPLE DUPLICATE: 1405611

Parameter	Units	10224324001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.4	7.3	.9	3	H6

SAMPLE DUPLICATE: 1405612

Parameter	Units	10224408001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.0	6.0	0	3	H6

QUALITY CONTROL DATA

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

QC Batch: WETA/14533
Analysis Method: ASTM D516-02
QC Batch Method: ASTM D516-02
Analysis Description: ASTM D516-9002 Sulfate Water
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

METHOD BLANK: 1404348
Matrix: Water
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	2.5	04/05/13 08:58	

LABORATORY CONTROL SAMPLE: 1404349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	7.5	7.4	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1404350 1404351

Parameter	Units	10224408001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	1050	20	20	1050	1070	15	81	80-120	1	30	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1404365 1404366

Parameter	Units	10224396008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	25.4	20	20	42.5	43.0	86	88	80-120	1	30	

QUALITY CONTROL DATA

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

QC Batch: WETA/14535
QC Batch Method: SM 4500-Cl E
Analysis Method: SM 4500-Cl E
Analysis Description: SM4500Cl-E Chloride
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

METHOD BLANK: 1404409
Matrix: Water
Associated Lab Samples: 10224408001, 10224408002, 10224408003, 10224408004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	2.0	04/05/13 11:05	

LABORATORY CONTROL SAMPLE: 1404410

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	30	30.9	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1404411 1404412

Parameter	Units	10224408001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	30.7	30	30	56.9	56.0	87	84	80-120	2	30	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1404413 1404414

Parameter	Units	10224469007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	246	30	30	262	263	56	60	80-120	.4	30	M1

QUALIFIERS

Project:	Old Landfill/Clark Tailings
Pace Project No.:	10224408

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PRL - Pace Reporting Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Landfill/Clark Tailings
Pace Project No.: 10224408

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10224408001	**BSB-GW-05**	EPA 200.8	MPRP/38392	EPA 200.8	ICPM/15738
10224408002	**BSB-GW-06**	EPA 200.8	MPRP/38392	EPA 200.8	ICPM/15738
10224408003	**BSB-GW-08**	EPA 200.8	MPRP/38392	EPA 200.8	ICPM/15738
10224408004	**BSB-GW-09**	EPA 200.8	MPRP/38392	EPA 200.8	ICPM/15738
10224408001	**BSB-GW-05**	EPA 120.1	WET/29896		
10224408002	**BSB-GW-06**	EPA 120.1	WET/29896		
10224408003	**BSB-GW-08**	EPA 120.1	WET/29896		
10224408004	**BSB-GW-09**	EPA 120.1	WET/29896		
10224408001	**BSB-GW-05**	SM 4500-H+B	WET/29846		
10224408002	**BSB-GW-06**	SM 4500-H+B	WET/29846		
10224408003	**BSB-GW-08**	SM 4500-H+B	WET/29846		
10224408004	**BSB-GW-09**	SM 4500-H+B	WET/29846		
10224408001	**BSB-GW-05**	ASTM D516-02	WETA/14533		
10224408002	**BSB-GW-06**	ASTM D516-02	WETA/14533		
10224408003	**BSB-GW-08**	ASTM D516-02	WETA/14533		
10224408004	**BSB-GW-09**	ASTM D516-02	WETA/14533		
10224408001	**BSB-GW-05**	SM 4500-Cl E	WETA/14535		
10224408002	**BSB-GW-06**	SM 4500-Cl E	WETA/14535		
10224408003	**BSB-GW-08**	SM 4500-Cl E	WETA/14535		
10224408004	**BSB-GW-09**	SM 4500-Cl E	WETA/14535		

bp rm

Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

10224408

BP Site Node Path:
BP Facility No: Old Landfill/Clark Tailings
Req Due Date (mm/dd/yy):
Rush TAT: Yes ___ No ___
Lab Work Order Number: 10224408

Lab Name: Pace Analytical	Facility Address: 1700 Elm st	Consultant/Contractor: Pioneer Technical Services
Lab Address: 1700 elm st suite 200	City, State, ZIP Code: Minneaplis MN 55414-2485	Consultant/Contractor Project No:
Lab PM: Julie Thieshafer	Lead Regulatory Agency:	Address: 40 Spanish Peak Drive, Suire 101 Bozeman, MT 59718
Lab Phone: 612 607 1700	California Global ID No.:	Consultant/Contractor PM: J.D. Emmert
Lab Shipping Accnt:	Enfos Proposal No:	Phone: 406-782-5177 Email: jemmert@pioneer-technical.com
Lab Bottle Order No: 62134	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP x Contractor ___

BP Project Manager (PM):
BP PM Phone:
BP PM Email:

Report Type & QC Level
Standard x
Full Data Package ___

Lab No.	Sample Description	Date	Time	Matrix				No. Containers / Preservative							Requested Analyses										Comments
				Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	Total Number of Container	Unpreserved	H2SO4	HNO3 (filtered)	HCl	Methanol		Dissolved Metals	(Sb, As, Ba, Be, Cd, Cr,	Co, Cu, Fe, Pb, Ni. Se,	Ag, Th, V, Zn)	pH, SC, Chloride, SO4						Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.
	BSB-GW-05	4/3/13	0948		x		Y	2	1		1				x				x						10224408001
	BSB-GW-06	4/3/13	1122		x		Y	2	1		1				x				x						002
	BSB-GW-08	4/3/13	1122		X		Y	2	1		1				X				X						003
	BSB-GW-09	4/3/13	1410		X		Y	2			1				X				X						004

Sampler's Name: DJ Renn
Sampler's Company: Pioneer Technical Services
Shipment Method: Fedex Ship Date:
Shipment Tracking No: 8010 5800 4433

22 01 24

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
DJ Renn / PTS	4/3/13	1500	Pace	4/4/13	9:14

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: [✓ Yes] / No | Temp Blank: [✓ Yes] / No | Cooler Temp on Receipt: 0.9 °F/C | Trip Blank: Yes / [✓ No] | MS/MSD Sample Submitted: Yes / [✓ No]

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form - ESI**	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: F-MN-L-210-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt – ESI Tech Specs

Client Name: BP-Pioneer Tech.

Project #:

WO# : 10224408

10224408

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 8010 5800 4433

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other: **Temp Blank?** ☑ Yes ☐ No

Thermom. Used: ☐ B88A912167504 ☐ 80512447 ☑ 72337080 **Type of Ice:** ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 0.1 **Cooler Temp Corrected (°C):** 0.9 **Biological Tissue Frozen?** ☐ Yes ☐ No

Temp should be above freezing to 6°C **Correction Factor:** +.8 **Date and Initials of Person Examining Contents:** CW 4/4/13

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume (triple volume provided for MS/MSD)?	☐ Yes	☑ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☒ No	☐ N/A	CW 4/4/13
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☑ Yes	☒ No	☐ N/A	11. CW 4/4/13
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	12.
-Includes Date/Time/ID/Analysis Matrix: WT				
All containers needing acid/base preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☑ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☑ Yes	☐ No	☐ N/A	Sample # 05 Y/1 07 Y/1 06 Y/1 08 Y/1
Per method, VOA pH is checked after analysis				Initial when completed: CW Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	14.
3 Trip Blanks Present?	☐ Yes	☐ No	☑ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Temp Log: Temp must be maintained at <6°C during login, record temp every 20 mins		
Opened Time: ~~11:08~~ 11:08	Temp: 0.1	Corrected Temp: 0.9
Time: ~~11:08~~ 11:12	put in cooler	
Time:	Temp:	Corrected Temp:

Project Manager Review: Date: 4/4/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Metals Digestion Log

Minnesota Laboratory

ICP Spike Sol. #1: 8074-693 #2: 8074-695 #3: N/A #4: N/A

Spike Vol. #1: 0.2 ML #2: 0.2 ML #3: N/A #4: N/A

Hydrogen Peroxide: N/A . Nitric: 1112120 Hydrochloric: N/A.

Temp: 96.0 C

Hot Block ID: 8

Digestion Tube Lot #: ML27KK03

Sunday, April 07, 2013

Analyst	Sample ID	Client	Sample Type	QC Batch	Initial Wt./Vol (g or ml)	Final Vol. (ml)	Project No.	Comments	Method	Prep Date
YT1	10224260001		PS	38392	50	50	10224260	PIPET MT-1011	2008 WD_P	4/7/2013
YT1	10224382001	BPAR-PIONEER-MT	PS	38392	50	50	10224382		2008 WD_P	4/7/2013
YT1	10224408001	BPAR-PIONEER-MT	PS	38392	50	50	10224408		2008 WD_P	4/7/2013
YT1	10224408002	BPAR-PIONEER-MT	PS	38392	50	50	10224408		2008 WD_P	4/7/2013
YT1	10224408003	BPAR-PIONEER-MT	PS	38392	50	50	10224408		2008 WD_P	4/7/2013
YT1	10224408004	BPAR-PIONEER-MT	PS	38392	50	50	10224408		2008 WD_P	4/7/2013
YT1	10224413001		PS	38392	50	50	10224413		2008 WD_P	4/7/2013
YT1	10224413002		PS	38392	50	50	10224413		2008 WD_P	4/7/2013
YT1	10224413003		PS	38392	50	50	10224413		2008 WD_P	4/7/2013
YT1	10224502001		PS	38392	50	50	10224502		2008 WD_P	4/7/2013
YT1	10224502002		PS	38392	50	50	10224502		2008 WD_P	4/7/2013
YT1	10224502003		PS	38392	50	50	10224502		2008 WD_P	4/7/2013
YT1	10224502004		PS	38392	50	50	10224502		2008 WD_P	4/7/2013
YT1	10224512001	BPAR-PIONEER-MT	PS	38392	50	50	10224512		2008 WD_P	4/7/2013
YT1	1404913	Quality Control	BLANK	38392	50	50			2008 WD_P	4/7/2013
YT1	1404914	Quality Control	LCS	38392	50	50			2008 WD_P	4/7/2013
YT1	1404915	Quality Control	MS	38392	50	50			2008 WD_P	4/7/2013
YT1	1404916	Quality Control	MSD	38392	50	50			2008 WD_P	4/7/2013

Peer Review ____________

MUR11

FedEx Express US Airbill

FedEx Tracking Number 8690 6816 2723

Form ID No. 0215

Sender's Copy

1 From *Please print and press hard.*

Date 4/3/13
Sender's FedEx Account Number

Sender's Name DJ Ronz
Phone (406) 498-0735

Company Pioneer-technical Services

Address 1101 S. Montana St.
Dept./Floor/Suite/Room

City Butte
State Mt
ZIP 57701

2 Your Internal Billing Reference OPTIONAL
First 24 characters will appear on invoice.

3 To

Recipient's Name Sample Recieving
Phone ( )

Company PACE ANALYTICAL SVCS INC

Recipient's Address 1700 ELM ST SE
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept./Floor/Suite/Room

Address
To request a package be held at a specific FedEx location, print FedEx address here.

City MINNEAPOLIS
State MN
ZIP 55414-2485

0398886741

Ship and track packages at fedex.com
Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service *Packages up to 150 lbs.*

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

☐ FedEx First Overnight
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

☐ FedEx 2Day
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

☐ FedEx 1Day Freight*
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 2Day Freight
Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 3Day Freight
Third business day.** Saturday Delivery NOT available.

* Call for Confirmation:

** To most locations.

5 Packaging

☐ FedEx Envelope*
☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
☐ FedEx Box
☐ FedEx Tube
☐ Other

* Declared value limit $500.

6 Special Handling

Include FedEx address in Section 3.

☐ **SATURDAY Delivery** NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☐ **HOLD Weekday** at FedEx Location NOT Available for FedEx First Overnight.

☐ **HOLD Saturday** at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?
One box must be checked.

☒ No
☐ Yes As per attached Shipper's Declaration.
☐ Yes Shipper's Declaration not required.
☐ Dry Ice Dry ice, 9, UN 1845 ______ x ______ kg
☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed.
☒ Recipient
☐ Third Party
☐ Credit Card
☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7
Exp. Date

Total Packages	Total Weight	Total Declared Value†
		$ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *Fee applies.*

519

Rev. Date 10/06•Part #158279•©1994–2006 FedEx•PRINTED IN U.S.A.•SRF

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

FedEx Express **US Airbill**

FedEx Tracking Number 8690 6816 2712

MUR11

Form ID No. 0215

Sender's Copy

1 From *Please print and press hard.*

Date 4/3/13

Sender's FedEx Account Number

Sender's Name DJ Renz

Phone (406) 498-0736

Company Pioneer - technical services

Address 1101 S. Montana street

Dept./Floor/Suite/Room

City Butte State MT ZIP 59701

2 Your Internal Billing Reference OPTIONAL

First 24 characters will appear on invoice.

3 To

Recipient's Name Sample Receiving Phone ( )

Company PACE ANALYTICAL SVCS INC

Recipient's Address 1700 ELM ST SE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City MINNEAPOLIS State MN ZIP 55414-2485

0398886741

Store your addresses at fedex.com
Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service *Packages up to 150 lbs.*

- ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- ☐ FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation:

** To most locations.

5 Packaging

☐ FedEx Envelope* ☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. ☐ FedEx Box ☐ FedEx Tube ☐ Other

* Declared value limit $500.

6 Special Handling

Include FedEx address in Section 3.

- ☐ **SATURDAY Delivery** NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- ☐ **HOLD Weekday** at FedEx Location NOT Available for FedEx First Overnight.
- ☐ **HOLD Saturday** at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?
One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry ice, 9, UN 1845 ____ x ____ kg ☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7 Exp. Date

Total Packages	Total Weight	Total Declared Value†
		$ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- ☐ No Signature Required — Package may be left without obtaining a signature for delivery.
- ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *Fee applies.*

519

Rev. Date 10/06•Part #158279•©1994–2006 FedEx•PRINTED IN U.S.A.•SRF

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

Ex Express® Package US Airbill

FedEx Tracking Number 8019 3766 0080

MUR4

Form ID No. 0215

Sender's Copy

ase print and press hard.

4/03/13 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Randy Hazlett Phone 406 491-4534

Pioneer Technical Services

1101 S. Montana

Dept./Floor/Suite/Room

Butte State MT ZIP 59701

rnal Billing Reference 1003 OPTIONAL
rs will appear on invoice.

SAMPLE RECIEVING Phone (612) 607-1700

PACE ANALYTICAL SVCS INC

1700 ELM ST SE

ver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

☐ HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

the HOLD location address or for continuation of your shipping address.

NNEAPOLIS State MN ZIP 55414-2485

0102687743

FedEx at your fingertips. Good call.
Go to fedex.com/mobilesolutions.

4 Express Package Service *To most locations.
NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning.*
Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?
One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ______ x ______ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment ***Bill to:***
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7 Exp. Date

Total Packages ______ Total Weight ______ lbs. Total Declared Value† $ ______ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Ex Express® Package US Airbill

FedEx Tracking Number 8019 3766 0090

MUR4

Form ID No. 0215

Sender's Copy

ase print and press hard.

4/03/13 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Randy Hazlett Phone 406 491-4534

Pioneer Technical Services

1101 S. Montana

Dept./Floor/Suite/Room

Butte State MT ZIP 59701

rnal Billing Reference 1003 OPTIONAL
rs will appear on invoice.

SAMPLE RECIEVING Phone (612) 607-1700

PACE ANALYTICAL SVCS INC

1700 ELM ST SE

ver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

☐ HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

r the HOLD location address or for continuation of your shipping address.

NNEAPOLIS State MN ZIP 55414-2485

0102687743

Learn to pack like a pro.
Go to fedex.com/packaging.

4 Express Package Service *To most locations.
NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning.*
Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?
One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ______ x ______ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment ***Bill to:***
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7 Exp. Date

Total Packages ______ Total Weight ______ lbs. Total Declared Value† $ ______ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

611

Ex Package
xpress US Airbill

FedEx Tracking Number 8019 3766 0079

MUR4

Form ID No. 0215

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se print and press hard.

/03/13 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Randy Hazlett Phone (406) 491-4534

Pioneer Technical Services

1101 S. Montana

Dept./Floor/Suite/Room

utte State MT ZIP 59701

nal Billing Reference 1003 OPTIONAL

s will appear on invoice.

SAMPLE RECIEVING Phone (612) 607-1700

PACE ANALYTICAL SVCS INC

700 ELM ST SE

ver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

the HOLD location address or for continuation of your shipping address.

NNEAPOLIS State MN ZIP 55414-2485

0102687743

Ship it. Track it. Pay for it. All online.
Go to fedex.com

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry ice, 9, UN 1845 ______ x ______ kg

☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment ***Bill to:***

Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7 Exp. Date

Total Packages ______ Total Weight ______ lbs. Total Declared Value† $ ______ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Ex Package
xpress US Airbill

FedEx Tracking Number 8019 3766 0046

MUR4

Form ID No. 0215

Sender's Copy

se print and press hard.

/03/13 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Randy Hazlett Phone (406) 491-4534

Pioneer Technical Services

1101 S Montana

Dept./Floor/Suite/Room

utte State MT ZIP 59701

nal Billing Reference 1003 OPTIONAL

s will appear on invoice.

SAMPLE RECIEVING Phone (612) 607-1700

PACE ANALYTICAL SVCS INC

700 ELM ST SE

ver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

the HOLD location address or for continuation of your shipping address.

NNEAPOLIS State MN ZIP 55414-2485

0102687743

FedEx at your fingertips. Good call.

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry ice, 9, UN 1845 ______ x ______ kg

☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment ***Bill to:***

Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7 Exp. Date

Total Packages ______ Total Weight ______ lbs. Total Declared Value† $ ______ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this Airbill you

611

Ex Express Package US Airbill

FedEx Tracking Number 8019 3766 0057

MUR4

Form ID No. 0215 **Sender's Copy**

ase print and press hard.

4/03/13 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Randy Hazlett Phone (406) 491-4534

Pioneer Technical Services

1101 S. montana Dept./Floor/Suite/Room

Butte State MT ZIP 59701

rnal Billing Reference 1003 OPTIONAL
rs will appear on invoice.

SAMPLE RECIEVING Phone (612) 607-1700

PACE ANALYTICAL SVCS INC

700 ELM ST SE Dept./Floor/Suite/Room
ver to P.O. boxes or P.O. ZIP codes.

☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

r the HOLD location address or for continuation of your shipping address.

NNEAPOLIS State MN ZIP 55414-2485

0102687743

Learn to pack like a pro. Go to fedex.com/packaging.

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M. Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required Package may be left without obtaining a signature for delivery.

☐ Direct Signature Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?
One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7 Exp. Date

Total Packages ____ Total Weight ____ lbs. Total Declared Value† $ ____ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Ex Express Package US Airbill

FedEx Tracking Number 8019 3766 0068

MUR4

Form ID No. 0215 **Sender's Copy**

ease print and press hard.

4/03/13 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Randy Hazlett Phone (406) 491-4534

Pioneer Technical Services

1101 S. montana Dept./Floor/Suite/Room

Butte State MT ZIP 59701

ternal Billing Reference 1003 OPTIONAL
cters will appear on invoice.

's SAMPLE RECIEVING Phone (612) 607-1700

PACE ANALYTICAL SVCS INC

1700 ELM ST SE Dept./Floor/Suite/Room
deliver to P.O. boxes or P.O. ZIP codes.

☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

e for the HOLD location address or for continuation of your shipping address.

INNEAPOLIS State MN ZIP 55414-2485

0102687743

Get transit times. Schedule pickups. Create labels. Go to fedex.com.

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M. Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required Package may be left without obtaining a signature for delivery.

☐ Direct Signature Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?
One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1797-5692-7 Exp. Date

Total Packages ____ Total Weight ____ lbs. Total Declared Value† $ ____ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

611

Pace Analytical
www.pacelabs.com

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Section B
Required Project Information:

Section C
Invoice Information:

Page: 1 **of** 1

Company:	Pioneer Technical	Report To:	J.D. Emmert	Attention:	Gary Keeler (406-497-6515)
Address:	40 Spanish Peak Dr.	Copy To:		Company Name:	BSB Public Works Dept
	Bozeman, MT 59718			Address:	126 W. Granite Butte,MT 59701
Email To:	jemmert@pioneer-techinical.com	Purchase Order No.:		Pace Quote Reference:	
Phone: 406-782-5177	Fax:	Project Name:	OLD LANDFILL	Pace Project Manager:	Julie Thieschafer
Requested Due Date/TAT:	**Standard**	Project Number:		Pace Profile #:	21705

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER ______

Site Location
STATE: MT

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N): Dissolved Metals — Y

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED ~~COMPOSITE~~ GRAB START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	⬇Analysis Test⬇	Cyanide	Nitrate+Nitrite	COD	8270	8151	8260	Dissolved Metals	8081	8082	Sulfide	8011		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BSB-GW-01	WT	G	[illegible]	1025				17	x	x	x	x	x					x	x	x	x	x	x	x	x	x	x				
2	BSB-GW-02	WT	G	[illegible]	[illegible]				11	x	x		x	x					x	x	x	x	x	x		x	x	x				
3	BSB-GW-03	WT	G	[illegible]	[illegible]				11	x	x		x	x					x	x	x	x	x	x		x	x	x				
4	BSB-GW-04	WT	G	[illegible]	1010				11	x	x		x	x					x	x	x	x	x	x		x	x	x				
5	BSB-GW-07	WT	G	[illegible]	[illegible]				3				x											x								
6	TRIP BLANK	WT	~~[illegible]~~						3				x											x								
7																																
8																																
9																																
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
8151 subbed to NOLA and FL	[illegible]	[illegible]	[illegible]							
8270, 8081 and 8260 subbed to NOLA										
Sulfide subbed to GB										
Cyanide and 8011 subbed to KS										
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: DJ R[illegible]

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): [illegible]

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

Old Butte-Silver Bow County Landfill
GROUNDWATER FIELD CHEMISTRY RESULTS AND PURGE VOLUMES
March-12

Well I.D.	Sample #	Depth (ft)	Radius (ft)	S.W.L. (ft)	TOC Elevation (ft)	Groundwater Elevation (ft)	pH. (su)	E.h. (mV)	S.C. (uS/cm)	T (Celsius)	Sample Time	H2O Volume Req'd (gal)	H2O Volume Purged (gal)	Comments
MBMG-2	BSB-GW-01	23.25	0.17	12.00	5529.88	5517.88	7.18	335.6	853	10.3	12:00	5.63	7.25	
BSB-A1	BSB-GW-02	57.00	0.17	35.34	5531.50	5496.16	7.32	138.0	454	10.2	15:55	10.83	2.25	
BSB-A5	BSB-GW-03	45.60	0.17	40.95	5524.62	5483.67	6.28	151.40	1694	10.6	13:00	2.33	2.75	
BSB-A6-R	BSB-GW-04	59.75	0.17	49.45	5554.41	5504.96	5.77	299.5	3250	7.3	11:15	5.15	1.80	
BSB-A6-R	BSB-GW-07	59.75	0.17	49.45	5554.41	5504.96	5.77	299.5	3250	7.3	12:15	5.15	1.80	VOC Duplicate
CLK-1	BSB-GW-05	19.00	0.17	3.63	5478.73	5475.10	6.36	182.0	1669	9.3	8:24	7.69	7.00	
CLK-2	BSB-GW-06	46.90	0.17	39.47	5511.17	5471.70	6.80	225.8	1711	8.4	12:12	3.72	5.00	
CLK-2	BSB-GW-08	46.90	0.17	39.47	5511.17	5471.70	6.80	225.8	1711	8.4	12:40	3.72	5.00	Raw, DM Duplicate
Blank	BSB-GW-09	NA	NA	NA	NA	NA	NA	NA	NA	NA	15:00	NA	NA	Field Blank

KEY:

NA	Measurement Not Taken
SA	Sample Not Taken

FedEx Express *NEW Package* *US Airbill*

FedEx Tracking Number 8010 5800 4433

MUR4

Form ID No. 0215

Sender's Copy

1 From *Please print and press hard.*

Date 4/3/13

Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name DJ Renz

Phone (406) 498 - 0736

Company Pioneer - technical services

Address 1101 South Montana Street

Dept./Floor/Suite/Room

City Butte State MT ZIP 59701

2 Your Internal Billing Reference

First 24 characters will appear on invoice.

10030 OPTIONAL

3 To

Recipient's Name SAMPLE RECEIVING

Phone (612) 607-1700

Company PACE ANALYTICAL SVCS INC

Address 1700 ELM ST SE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

☐ HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City MINNEAPOLIS State MN ZIP 55414-2485

0454321577

The FedEx US Airbill has changed. See Section 4.
For shipments over 150 lbs., order the new FedEx Express Freight US Airbill.

4 Express Package Service

* To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.

2 or 3 Business Days

☐ NEW FedEx 2Day A.M.
Second business morning.*
Saturday Delivery NOT available.

☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

5 Packaging

* Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. ***Fee applies.***

☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. ***Fee applies.***

Does this shipment contain dangerous goods?

One box must be checked.

☒ No

☐ Yes
As per attached Shipper's Declaration.

☐ Yes
Shipper's Declaration not required.

☐ Dry Ice
Dry Ice, 9, UN 1845 ______ x ______ kg

☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender
Acct. No. in Section 1 will be billed.

☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. / Credit Card No. 1797-5692-7

Exp. Date

Total Packages ______

Total Weight ______ lbs.

Total Declared Value† $ ______ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

611

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PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

BP Site Node Path: ______

BP Facility No: Old Landfill/Clark Tailings

Req Due Date (mm/dd/yy): ______

Rush TAT: Yes ____ No ____

Lab Work Order Number: ______

Lab Name: Pace Analytical	Facility Address: 1700 Elm St	Consultant/Contractor: Pioneer Technical Services
Lab Address: 1700 Elm St Suite 200	City, State, ZIP Code: Minneapolis, MN [illegible]	Consultant/Contractor Project No:
Lab PM: Julie [illegible]	Lead Regulatory Agency:	Address: 40 Spanish Peak Drive, Suire 101 Bozeman, MT 59718
Lab Phone: [illegible] 607 1700	California Global ID No.:	Consultant/Contractor PM: J.D. Emmert
Lab Shipping Accnt:	Enfos Proposal No:	Phone: 406-782-5177 Email: jemmert@pioneer-technical.com
Lab Bottle Order No: C21-4	Accounting Mode: Provision ____ OOC-BU ____ OOC-RM ____	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP x Contractor ____

BP Project Manager (PM):

BP PM Phone:

BP PM Email:

				Matrix				No. Containers / Preservative							Requested Analyses										Report Type & QC Level
Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	Total Number of Container	Unpreserved	H2SO4	HNO3 (filtered)	HCl	Methanol		Dissolved Metals	(Sb, As, Ba, Be, Cd, Cr,	Co, Cu, Fe, Pb, Ni. Se,	Ag, Th, V, Zn)	pH, SC, Chloride, SO4						Standard x Full Data Package ____ **Comments** Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.
	BSB-GW-05	4/[illegible]	[illegible]		x		Y	2	1		1				x				x						
	BSB-GW-06	[illegible]	11[illegible]		x		Y	2	1		1				x				x						
	[illegible]-GW-08	4/13/12	[illegible]		X		Y	2	1		1				X				X						
	[illegible]-GW-01	4/13/12	1410		X		Y	2	1		1				X				X						

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: DT Renz						
Sampler's Company: Pioneer Technical Services	DT Renz PTS					
Shipment Method: [illegible] Ship Date:						
Shipment Tracking No: [illegible]						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ______ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Pace Analytical®

BOTTLE ORDER # 62134

3/12/2013 3:34:53 PM

Pace Analytical Services, Inc.
1700 Elm Street
Ste 200
Minneapolis,MN 55414
(612) 607-1700

Contact: Brad Hollamon
Company: Pioneer Technical Services
Address: 1101 S. Montana Street
City, St, Zip: Butte ,MT, 59701
Phone: (406) 490-7678 **Ext.**
Initiator: Julie Thieschafer **PM:** JMT

Ship To:
Contact: Brad Hollamon
Company: Pioneer Technical Services
Address:
City, St, Zip: , ,59701
Phone: **Ext.**

Return To:
Contact:
Lab Name: PACE - MN
Address: 1700 Elm Street
Ste 200
City, St, Zip: Minneapolis ,MN ,55414
Phone: (612) 607-1700 **Ext.**

Proj. Description: BP-Old Landfill/Clark Tail **Quote Number:** **Profile Number:**
Needs Bottles by: 03/20/2013 - **Expected Date Ret:** **Shipping Method:** FedEx

Return Shipping Labels
☐ No Shipper #
☑ With Shipper #

COC's
☐ Blank #
☑ Preprinted

Bottle Labels
☐ Blank
☐ Pre-Printed - With Sample IDs
☑ Pre-Printed - No Sample IDs

Bottles
☐ Boxed Cases
☑ Individually Wrapped
☐ Grouped By Sample ID / Matrix

Trip Blank ☐

Misc
☐ Sampling Instructions
☑ Custody Seal
☑ Temp. Blanks
☑ Coolers:
☐ Extra Bubble Wrap
☐ 10 mL Cut-Off Syringes
☐ Short Hold / Rush Stickers
☐ DI Water 0 Liter(s)

Qty	Total	Matrix	Method	BottleType	LotNumber	Note
4	4	Water	pH, SC, Chloride, Sulfate	1 L plastic unpres.		
4	4	Water	Dissolved Metals	250mL plastic HNO3		

Notes:

Hazard Shipping Placard In Place : YES

*Sample receiving hours are Monday through Friday 8:00 am to 6:00 pm and Saturday from 9:00 am to 12:00 pm unless special arrangements are made with you project manager.

*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.

*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage and disposal.

*Payment term are net 30 days.

*Please include the proposal number on the chain of custody to insure proper billing.

Shipped Date: 3 12 13
Shipped By: TN
Verified By:

Pace Analytical®	Document Name: **Sample Acceptance Policy**	Document Revised: 08Jun2012 Page 1 of 1
	Document No.: **F-MN-Q-215-rev.00**	Issuing Authority: Pace Minnesota Quality Office

SAMPLE ACCEPTANCE POLICY

PACE ANALYTICAL SERVICES, INC

In accordance with regulatory guidelines, Pace Analytical Services, Inc. (PASI) complies to the following sample acceptance policy for all samples received.

If the samples do not meet the sample receipt acceptance criteria outlined below, the laboratory is required to document all non-compliances, contact the client, and either reject the samples or fully document any decisions to proceed with analyses of samples which do not meet the criteria. Any results reported from samples not meeting these criteria are appropriately qualified on the final report.

All samples must:

- Have unique client identification that are clearly marked with durable waterproof labels on the sample containers and that match the chain of custody.
- Have clear documentation on the chain of custody related to the location of the sampling site with the time and date of sample collection.
- Have the sampler's name and signature
- Have the requested analyses clearly marked
- Have clear documentation of any special analysis requirements (data deliverables, etc.);
- Be in appropriate sample containers with clear documentation of the preservatives used.
- Be correctly preserved unless method allows for laboratory preservation.
- Be received within holding time. Any samples with hold times that are exceeded will not be processed without prior client permission.
- Have sufficient sample volume to proceed with the analytical testing. If insufficient sample volume is received, analysis will not proceed without client approval.
- Be received within appropriate temperature ranges, (for samples requiring cooling to 4 °C, the acceptable range is just above freezing to 6°C, as defined by NELAC). The cooler temperature is recorded directly on the COC. Samples that are delivered to the lab immediately after collection are considered acceptable if there is evidence that the chilling process has been started, for example by the arrival of the samples on ice. If samples arrive that are not compliant with these temperature requirements, the client will be notified. The analysis will NOT proceed unless otherwise directed by the client. If less than 72 hours remain in the hold time for the analysis, the analysis may be started while the client is contacted to avoid missing the hold time. Data will be appropriately qualified on the final report.

Upon sample receipt, the following items are also checked and recorded:

- Presence of custody seals or tapes on the shipping containers
- Sample condition: Intact, broken/leaking
- Sample holding time
- Sample pH when required
- Appropriate containers

Samples for drinking water analysis that are improperly preserved, or are received past holding time, are rejected at the time of receipt, with the exception of VOA samples that are tested at the time of analysis.

Job(s) Location(s) Butte silver Bow Landfill clark Tailings **Date:** 4/3/13

Name of AA or project oversight:

SIMOPS or Multi-Crew Activity ☐ Yes ☒ No If yes, describe. SIMOPS

Has the SIMOPS work plan been communicated to all workforce? ☐ Yes ☒ No

Name of SIMOPS PIC: **Company:**

Does the work activity require an MoC?	☐ Yes	☒ No
If yes, has it been authorized by BP management for start-up?	☐ Yes	☐ No (If No, Stop Work and consult BP management.)
Does a valid risk-assessed SOP for this job exist?	☒ Yes	☐ No
If yes, have person(s) performing work been trained in that procedure?	☒ Yes	☐ No (If No, conduct TSEA.)

List any safety discussion topics covered: Proper Handwashing

List all jobs to be performed today (Scope of work for day): Sample clark wells #1 & #2.

Identify if there are any permitted activities and document the permit number: None.

Does each job and task have a valid, associated risk assessment assigned to each listed job above?	☒ Yes	☐ No	
Have job and task risk assessments been validated on site?	☒ Yes	☐ No	
Have newly identified risks been documented in the TSEA?	☐ Yes	☒ No	
Has a member of the workforce conducting each task participated in the Risk Assessment for that task?	☒ Yes	☐ No	
Have all members of the workforce confirmed understanding of the work scope, hazards, risk controls and mitigation?	☒ Yes	☐ No	
Was a competent person involved in this or any other risk assessment pertaining to these tasks?	☒ Yes	☐ No	
Has everyone reviewed the current Emergency Response Plan?	☒ Yes	☐ No	
Have equipment checks been completed, documented and reviewed?	☐ Yes	☐ No	☒ N/A

(Do not proceed unless the answer to all of the above questions is Yes or N/A)

Will any conditions change the muster points for today? ☐ Yes ☑ No If yes, describe and discuss with crew:

Post Daily Review:

Best practice/activity(s) observed: ☐ Yes ☐ No (If Yes, describe them)

Were there any Incidents or First Aid Reports for the day? ☐ Yes ☐ No (If Yes, name them)

Were there any 'Stop Work' interventions? ☐ Yes ☐ No (If Yes, describe them)

Area for improvement Practice/Activity(s) Observed: ☐ Yes ☐ No (If Yes, name them)

DAILY TOOL X MEETING RECORD

D ment Control Number________________

Page 2 of 2

Signature Page

I know the hazards:

By signing here, you are stating the following:

1. You have been involved in the Task Safety Environmental Analysis and understand the hazards and risk control actions associated with each task you are about to perform.
2. You understand the permit to work requirements applicable to the work you are about to perform (if it includes permitted activities).
3. You are aware that no tasks or work (that is not risk-assessed) is to be performed.
4. You also are aware of your obligation to **'Stop Work'** *(See Stop Work Section).*

I arrived and departed fit for duty:

5. You are physically and mentally fit for duty.
6. You are not under the influence of any type of medication, drugs or alcohol that could affect your ability to work safely.
7. You are aware of your responsibility to bring any illness, injury (regardless of where or when it occurred) or fatigue issue you may have to the attention of the Work Crew Leader.
8. You signed out uninjured unless you have otherwise informed the Work Crew Leader.

SIMOPS NOTE:

SIGNATURES ARE REQUIRED BY ALL PERSONS INVOLVED IN A WORK TASK OR WHO MAY BECOME AFFECTED BY A SIMOPS SITUATION.

Individual Name/Company Name/Signature	Initials & Sign in time	Initials & Sign out Time
DJ Renz / PTS / DJR	In & Fit DJR 0830	Out & Fit 1200
Randy Hazlett / PTS	In & Fit DJR 0830	Out & Fit 1200
	In & Fit	Out & Fit
	In & Fit	Out & Fit
	In & Fit	Out & Fit
	In & Fit	Out & Fit
	In & Fit	Out & Fit
	In & Fit	Out & Fit
	In & Fit	Out & Fit

At the conclusion of the day, I certify that the job site is being left in a safe condition and there were no reports of injury or first aid.

☐ Yes ☐ No

Signature of Work Crew Leader: ______________________________

(If above answer is No, inform the AA or PO, when applicable.)

I will STOP the job any time anyone is concerned or uncertain about safety.

I will STOP the job if anyone identifies a hazard or additional mitigation not recorded on the TSEA.

I will be alert to any changes in personnel, conditions at the work site or hazards not covered by the original TSEA.

If it is necessary to **STOP THE JOB**, I will reassess the task, hazards and mitigations; and then amend the TSEA as needed.

STOP

Names of site visitors not involved in the work activities

Definitions: **Project** – A planned set of interrelated jobs to be executed over a period of time. **Job** – A general activity, including several different tasks that occur when working on a project. **Task** – One of several potential specific actions that occur as part of the process to complete a job. **Hazard** – The potential for an uncontrolled release of, or unwanted contact with, a biological or energy source.